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DATA VALIDATION AND SUMMARY FOR THE NRL REMOTE SENSING
EXPERIMENT: PHELPS.. (U) NAVAL RESEARCH LAB WASHINGTON
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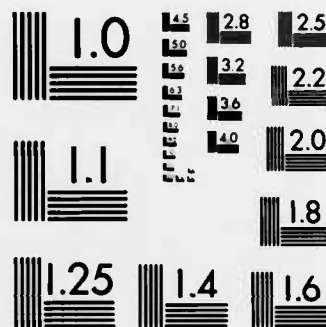
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NRL Memorandum Report 5160

**Data Validation and Summary for the
NRL Remote Sensing Experiment:
Phelps Bank, July, 1982**

Part II: Meteorology

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August 26, 1983

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**DATA VALIDATION AND SUMMARY FOR THE
NRL REMOTE SENSING EXPERIMENT:
PHELPS BANK, JULY, 1982**

Part II: Meteorology

I. INTRODUCTION

For several years, Synthetic Aperture Radar (SAR) images of the sea surface revealed planar signatures which were remarkably similar to the bathymetric contours below the water in depths less than about 30m. Such sea-surface bathymetric signatures were also observed by side-looking airborne radar (SLAR). To address the scientific questions raised by these observations, a multi-institutional program (the Airborne Surveillance Phenomenology Program; ASPP) was established at the Naval Research Laboratory, Washington, DC (The original plans are described in Valenzuela and Chen, 1983.). In July, 1982 as the initial field effort of ASPP, a pilot experiment was conducted southeast of Nantucket Island centered around the Asia Rip of Phelps Bank (40°50'N, 60°20'W). The experiment was to establish techniques for a comprehensive experiment in 1984, to learn about the oceanographic and meteorological environs of Asia Rip, and to obtain a data set for preliminary analysis.

The Nantucket Shoals area was chosen for the experiment because SAR imagery obtained in this area by SEASAT in 1978 (Beal, et al, 1981; p.22) showed a wealth of bathymetric signatures.

During the pilot experiment, meteorological, hydrographic, radar and wave buoy data were gathered. The data was confined to the tessera 40°30' to 41°10'N and 68°55' to 69°45'W. The data was obtained in two segments: 11 to 14 and 17 to 21 July, 1982. This report summarizes the meteorological conditions in the operational area during the experiment. The hydrographic situation is summarized in Kaiser (1983).

Manuscript approved July 20, 1983.

II. INSTRUMENTATION

Sensors were placed on the USNS HAYES (T-AGOR 16) to measure air temperature, air humidity, wind speed and direction, upper ocean temperature and salinity, ship roll, heading, latitude and longitude. The ship course and speed were calculated by the Loran-C navigation aid. Ship screw speed and pitch were also monitored.

The list of data channel labels and function are given in Table 2. 1. In some cases both primary and backup systems were deployed and these are indicated. For all other variables only one sensor was used. Fig. 2. 1, a side view of the USNS HAYES, shows the location of the various environmental sensors. The air temperature and dew point/humidity sensors were 10m above the dead water line (DWL). The wind sensors were 22.5m above the DWL and the ocean temperature and salinity sensors were 7m below the DWL. The ship roll sensor was on the main deck level mid-ship.

A. Description of instrumentation:

1. Air temperature and dew point/relative humidity

The primary air temperature/dew point system was a General Eastern 2100MPS. The temperature sensor (TA1) is a platinum resistance thermometer (PRT). The dew point (TDP1) is measured directly by a PRT embedded in an optically controlled cooled mirror. Both sensors are mounted in an aspirated airway in a Dewar and external white radiation shield. The mirror is automatically "cleaned" once every 24 hours.

The backup air temperature (TA2) and relativity humidity (TDP2) sensor was a General Eastern Model 411 sensor and Model 450 signal processor. The temperature sensor is a PRT and the humidity sensor is of the sulfonated polystyrene ion exchange type with temperature compensation provided by a thermistor. Both sensors were mounted in a double-radiation-shielded aspirated horn (Climet 016-2). Both sensors were mounted on the starboard jackstaff 10m above the DWL (Fig 2. 1).

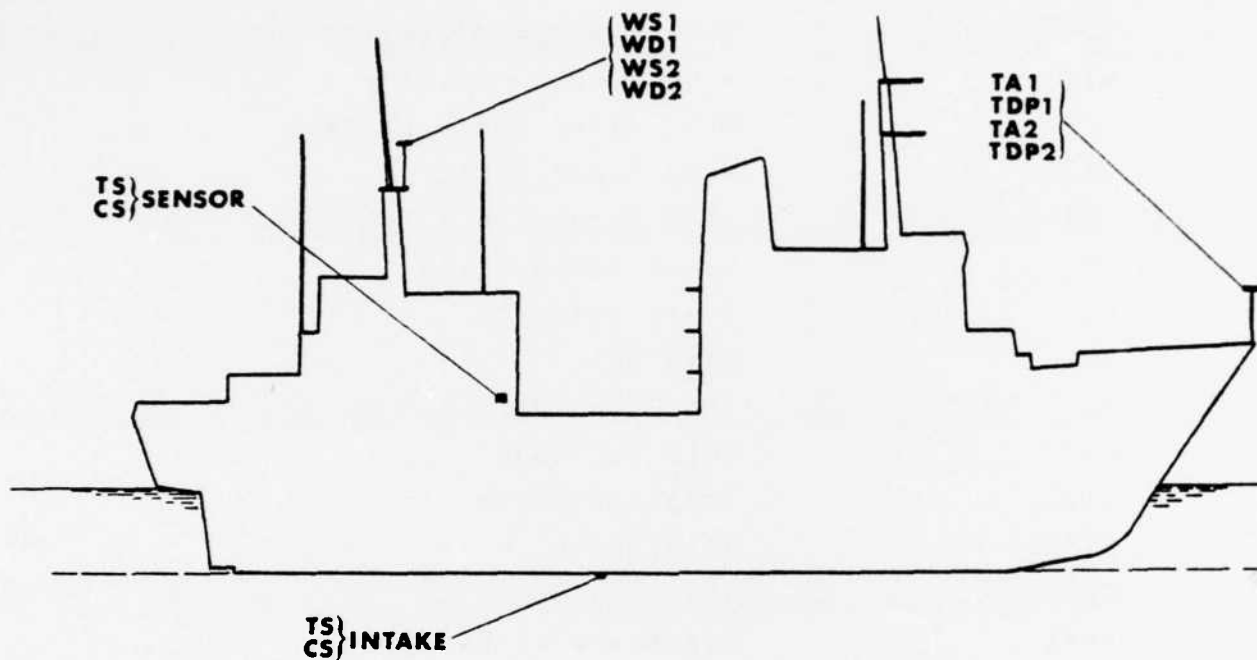


Fig. 2.1. Location of the meteorological sensors on the USNS HAYES. Water for TS and CS is pumped at 300 cc/sec through insulated hose to the sensor located in the laboratory.

Table 2. 1 Data channels, labels and functions

Channel/Label	Function
TA1	Air temperature - primary sensor
TDP1	Air dew point - primary
TA2	Air temperature - backup
TDP2	Relative humidity - backup
WS1	Wind speed - primary
WD1	Wind direction - primary
WS2	Wind speed - backup
WD2	Wind direction - backup
TS	Ocean temperature
CS	Ocean salinity
ROLL	Ship roll
HD	Ship heading
LAT	Ship latitude
LONG	Ship longitude
SPEED	Ship speed
COURSE	Ship course
RPM1	Starboard screw speed
PI1	Starboard screw blade pitch
RPM2	Port screw speed
PI2	Port screw blade pitch

2. Wind speed and direction

The primary and backup wind speed and direction instruments were Model WS201 systems manufactured by Teledyne Geotech. Wind speed is measured in with a three cup anemometer which drives an optical chopper producing a frequency output proportional to the wind speed. Direction is determined with a vane driving a potentiometer. The direction signal spans 0 to 540 degrees to suppress the discontinuity between 0 and 360 degrees. Since 0 and 360 degrees points towards the bow of the ship, transiting into a headwind would cause the wind vane to oscillate around 0° and an average of this wind direction would be about 180° without the overrange to 540°.

Both wind systems were mounted on 3m masts on the aft platform (Fig. 2. 1). The primary system was on the starboard side and the backup system on the port side. They were both 22.5m above the DWL. This location was a compromise between being well above all possible sources of interference from structural members of the ship and not being so far above the water so that the correction of the wind speed to 10m was large.

Since the wind sensors were mounted on a mast 22.5m above DWL, ship roll could induce sufficient relative motion to the sensors to cause erroneous readings; hence, the wind data was corrected for this using a roll sensor mounted midship. The roll sensor was a Robinson-Halpern Model 685B inclinometer.

3. Ocean temperature and salinity:

These quantities were measured with a Plessey Model 6600T thermosalinograph. Temperature (TS) is sensed with a PRT and conductivity with a thermistor-compensated induction conductivity cell. This data is then converted to salinity (CS) directly in the unit. The water was drawn in 7m below DWL and pumped to the sensor assembly on deck through insulated plastic tubing. The nominal flow rate was 300cc/sec. The water first passed through a filter before entering the thermosalinograph sensor housing.

4. Navigation

The primary navigation aid was two Northstar 7000 Loran-C systems. These have a nominal accuracy of 0.1 km in the Nantucket Shoals area due to the excellent Loran coverage there. The Loran-C time delays, calculated latitude (LAT) and longitude (LONG), and calculated ship course (CSE) and speed (SPEED) were provided by the Loran set. The course and speed were averaged over about 100 sec.

B. CALIBRATION

Most of the sensors were calibrated either in the laboratory or in situ. WS1 and WS2 were factory calibrated at the time of manufacture. The main factors which would affect the calibration are the bearings which are periodically checked for degradation. Intercomparison of WS1 and WS2 also verify they retain their accuracy. Four groups of calibrations were performed: 1) temperature (TA1, TDP1, TA2; laboratory), 2) wind direction (WD1, WD2; laboratory), 3) relative humidity (TDP2; laboratory), and 4) thermosalinograph (TS, CS; in situ).

1. Temperature calibration:

The temperature standard for the calibrations was a Dymec Model 2801A quartz thermometer with a least count of $.0001^{\circ}\text{C}$. This quartz thermometer was calibrated against a standard quartz system over the range 0 to 40°C . Then the TA1, TDP1 and TA2 systems were calibrated over the range of 18 to 36°C and appropriate correction factors determined. Over the temperature range encountered in the experiment ($<27^{\circ}\text{C}$) TA1, TA2 and TDP1 were all accurate to $.05^{\circ}\text{C}$ (Fig 2. 2).

2. Wind calibration

WS1 and WS2 were both factory calibrated to 0.5m/sec or 2% of air speed which ever is greater. WD1 and WD2 were laboratory calibrated. WD1 and WD2 errors are shown in Fig 2. 2. The maximum error is less than 2.5 degrees for both systems.

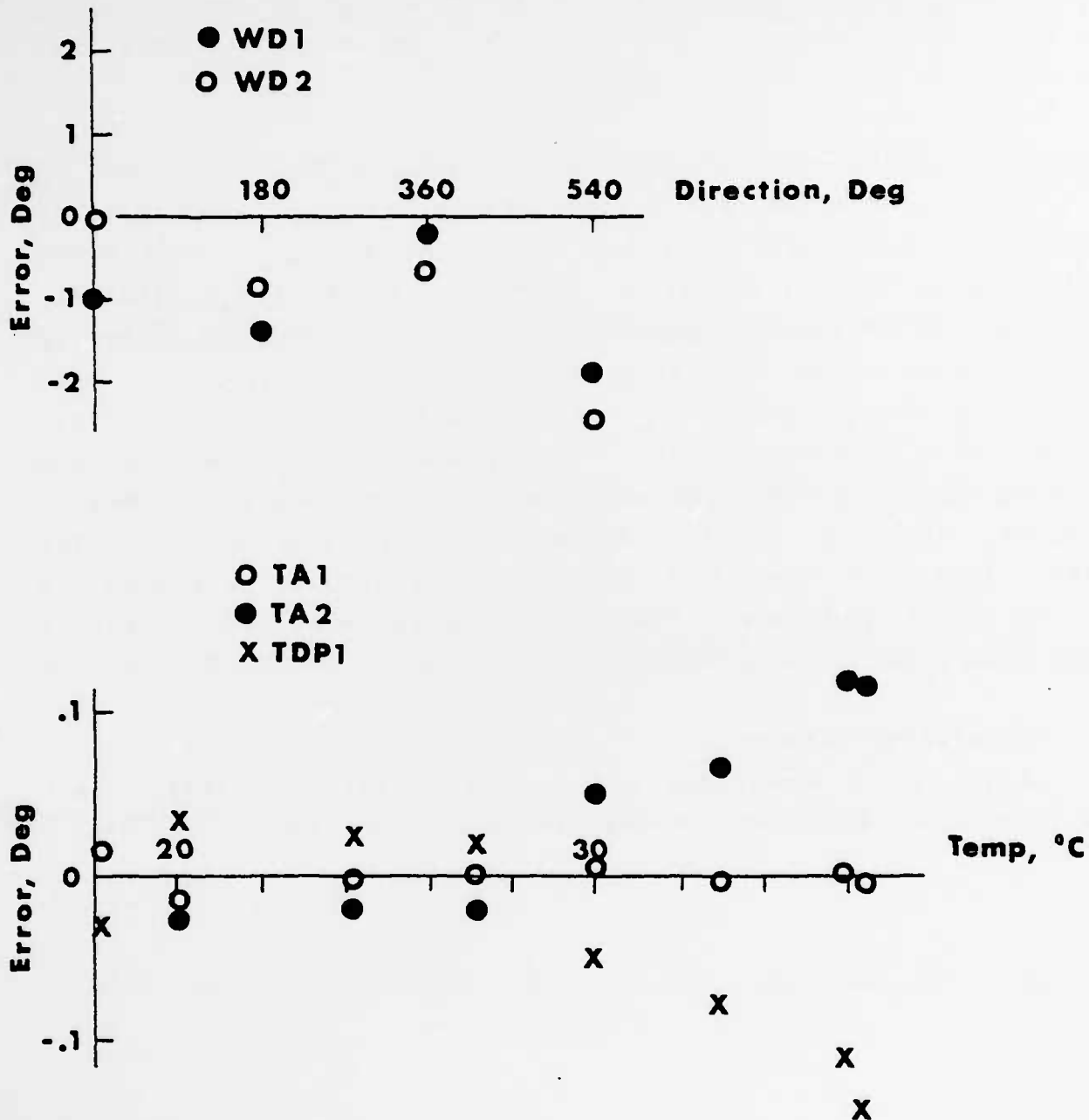


Fig. 2.2. Calibration data on WD1, WD2, TA1, TA2 and TDP1.

3. Relative Humidity Calibration

TDP2 was a relative humidity sensor. It was laboratory calibrated against saturated salt solutions which produce known relative humidities from 33% to 96.5%. The error was less than 2% over this range.

4. Thermosalinograph Calibration

The thermosalinograph measured temperature (TS) and salinity (CS) of 7m deep water. It was calibrated against a Neil Brown CTD (conductivity, temperature, depth) profiles in situ (Kaiser, 1983, describes the CTD instrument and accuracies), by selecting CTD casts with special characteristics. The calibration data could only be obtained when the CTD casts indicated homogenous water within 2 meters of the 7m depth, when the CTD down cast and up cast were the same; and when the thermosalinograph showed no temporal variation in the 7m water within 5 minutes of the cast. This left nine casts which could be used to determine the TS and CS calibrations. From these the root-mean-square errors are: TS, .065°C; CS, .031%.

5. Calibration Summary

Table 2. 2 summarizes the important data channels, their resolution and rms error or inaccuracy.

Table 2. 2. Summary of Calibrations and Errors

<u>Channel</u>	<u>Resolution</u>	<u>rms error/ innaccuracy</u>
TA1	.001°C	.010°C
TDP1	.001	.034
TA2	.001	.031
TS	.001	.065
TDP2	.01%	2%
CS	.001%	0.31%
WS1	.05m/sec	{ Greater of .5m/sec or 2% of reading
WS2	.05	
WD1	1°	1.3°
WD2	1°	1.3°
LAT	0.01'	0.1'
LONG	0.01'	0.1'

III. Database:

A. Description

The data was collected during two periods each of about seven days. Each channel was read once every two seconds. Several interruptions occurred due to the computer. Fig 3. 1 shows the operational periods of each sensor. The two second data (in original form: volts, frequency or digital) was logged directly onto digital magnetic tape. The data acquisition programs converted the raw data to digital form and passed the time of day and data to the processing system. Data processing proceeded according to guidelines established and maintained by the user. Every minute, data averages were output to disk files. Every 15 minutes, data averages, results of physical quantity calculations, and data quality assessments were output to both disk files and hard copy. A detailed discussion of the acquisition and processing system is given in Munch and Kaiser, 1983.

Some of the data channels (TA1, TDP1, TA2, WS1, WD1, TS and CS) were recorded on strip-chart recorders. For TS and CS, a portion of the strip-charts were read to fill data voids created by computer or instrument failures.

B. Contents of Files:

The contents of the 2 sec raw data tapes are the first 43 words of Table 3. 1. Tables 3. 1 and 3. 2 give the contents of the 1 minute averages file and the 15 minute averages file. The algorithms used to generate the variables and parameters are given in IV.

	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205
TA1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TDP1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TA2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TDP2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WS1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WD1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WS2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WD2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TS	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
CS	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ROLL	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
HDG	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
LAT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
LON	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SPEED	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
CSE	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RPM1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PI1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RPM2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PI2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

--- PRIMARY, --- BACKUP, --- HAND DIGITIZED

Fig. 3.1. Operational periods of all meteorological and ship parameter sensors. No line indicates no data.

Table 3. 1. Data Format for File SMIN1
(1-minute averages)

<u>Words</u>	<u>Channel #</u>	<u>Channel</u>	<u>Description</u>
0			Hours
1			Seconds
2			10's milliseconds
3			Years
4	0	TA1	Air Temperature 1
6	1	TDP1	Dew Point 1
8	2	TA2	Air Temperature 2
10	3	TDP2	Dew Point 2
12	4	WS1	Wind Speed 1, Starboard
14	5	WD1	Wind Direction 1, Starboard
16	6	WS2	Wind Speed 2, Port
18	7	WD2	Wind Direction 2, Port
20	8	TD	Thermosalinograph Temperature
22	9	CS	Thermosalinograph Salinity
24	10	TW	Water Temperature
26	11	ROLL	Ship Roll
28	12	Spare	For future use
30	13	Spare	For future use
32	14	HD	Ship Heading
34	15	RPM1	RPM, Starboard Screw
36	16	PI1	Pitch, Starboard Screw
38	17	RPM2	RPM, Port Screw
40	18	PI2	Pitch, Port Screw
42	19	PLOG	Pitot Log
44	20	LAT	Latitude
46	21	LONG	Longitude
48	22	SPEED	Ship Speed
50	23	COURSE	Ship Course

Table 3. 2. Data Format for File SMIN5 (15-minute averages)

Beginning Word

<u>Word</u>	<u>Variable</u>	<u>Description</u>	<u>Units</u>
0	I (1)	Time, hours from beginning of year	Hours
1	I (2)	Time, seconds from beginning of day	Seconds
2	I (3)	10's milliseconds from beginning of second	10 msec
3	I (4)	Year	Integer
4	LAT	Latitude	Deg.
5	RLAT	Latitude	Min.
7	LONG	Longitude	Deg.
8	RLONG	Longitude	Min.
10	LRSPD	Ship speed calculated by Loran-C	Kts
12	PLOG	Ship speed from Pitot Log	Kts
14	HEAD	Ship heading	Deg.
16	CSE	Ship course calculated by Loran-C	Deg.
18	TA	Air temperature in physical units	°C
20	TDP	Dew point temperature in physical units	°C
22	WS	Wind speed in physical units	m/sec
24	WD	Wind direction in physical units	Deg.
26	BLANK	For future use	- - -
28	RLSPD	Ship roll speed	m/sec
30	RMSRL	RMS ship roll	Deg.
32	TW	Water temperature from towed thermistor	°C
34	TS	Water temperature from thermosalinograph	°C
36	SALIN	Water salinity from thermosalinograph	°/oo
38	SIGT	Water sigma-T from TS and SALIN	gm/cm ³
40	TATW	TA-TW	°C
42	TDPTW	TDP-TW	°C
44	H	Sensible water-to-air heat flux	watts/m ²
46	E	Evaporative water-to-air heat flux	watts/m ²
48	TVATW	TVA-TVW	°C
50	TVA	Virtual air temperature	°C
52	TVW	Virtual air temperature when air is saturated at TW	°C
54	RH	Relative humidity	%
56	QWQA	QW-QA	gm/kgm
58	QW	Specific humidity of air	gm/kgm
60	QA	Specific humidity of air when saturated at TW	gm/kgm
62	TAU	Momentum stress on water	dyne/cm ²
64	L	Monin-Obukhov length scale	m
66	ZO	Sea surface roughness height	cm
68	CD	Drag coefficient for momentum	- - -
70	CH	Drag coefficient for sensible heat	- - -
72	CE	Drag coefficient for latent heat	- - -
74	USTAR	Friction velocity	cm/sec
76	TSTAR	TA	- - -
78	QSTAR	QA	- - -
80	PA	Atmospheric pressure	mbar
82	HW	Height of anemometer above DWL	meters
84	DT	Time interval between data scans	seconds

Table 3. 2 Data Format for File SMIN5 (15-min averages) (Cont)

<u>Word</u>	<u>Variable</u>	<u>Description</u>	<u>Units</u>
86	HT	Heights of air temperature & dew point sensors above DWL	meters
88	RBLN2	Blank	
90	VB	Current background variances - array	
130	RVAL	Current background variance thresholds - array	
170	FLG15	Total variance flags generated in last 15-minutes - array	
230	DAT15	15-minute raw data array	
278	STA	TA variance over 15-minutes	
280	STDP	TDP variance over 15-minutes	
282	SWS	WS variance over 15-minutes	
284	SWD	WD variance over 15-minutes	
286	SPLOG	PLOG variance over 15-minutes	
288	IBLK2	Blank	
289	OPTN1	System Execution Parameters algorithm selectors	
293	RPTN2	System Execution Parameters calibrators	
301	STS	TS variance over 15-minutes	
303	IBLK5	Blank	

IV. Data Processing

A. Overview

The raw data was read once every two seconds. This data was averaged over 1 minute to eliminate variance due to ship motion (typically 6-12 sec. period). Then various quantities were calculated from these averages (correlations and variances) and these quantities were averaged over 15 minutes to minimize the variability of the lower atmospheric boundary layer. The appropriate boundary layer averaging interval is actually determined by the properties of the boundary layer existing during the measurement. The appropriate averaging period can vary from 100 to 2000 sec.

The wind data was corrected for ship roll since the wind sensors were on a 22.5m mast. Then the heading was combined with the wind direction. The wind velocity data was combined with the ship velocity data from the Loran-C to give true wind velocity at 22.5m. This wind velocity was then reduced to 10m elevation assuming a neutral atmosphere.

The dew point 2 (TDP2) sensor actually outputs relative humidity. This is converted to a vapor pressure and then to dew point.

The raw 2 sec data was wild point edited and then scanned for noise by comparing a running 60 sec variance to an average "background" variance. Any noisy records were flagged, and statistics on noise were compiled for each channel. The user selected the noise threshold for each channel and this could be changed during execution.

The one minute data, which represents atmospheric conditions averaged to remove ship motion contamination, is useful to examine variability on short time scales.

The 15 minute output is intended to provide the final characterization of the environment for all the scientists participating in the experiment.

B. Calculation of parameters

The parameters were calculated from the one minute averages in Table 4. 1. An overbar denotes a one minute average

$$\bar{x} = \frac{1}{30} \sum_{i=1}^{30} x_i, \text{ where } x_i \text{ is a 2 second reading converted to}$$

physical units).

From the one minute average variable values the various parameters are calculated and then averaged. The parameters and units are defined in Table 3. 2. The quantities which represent 15-minute averages are formed as

$$\bar{x} = \frac{1}{15} \sum_{i=1}^{15} f(x_i)$$

where \bar{x} is the one minute average. The functions f are defined in Table 4. 2; f would be the unity multiplier in the case of an unweighted average (e.g., TA, TDP); these are omitted from Table 4. 2. In Table 4. 2 the 15-minute average quantity is on the left and $f(\bar{x})$ on the right.

The parameterizations of CD, CE, CH, E and H are due to Smith (1980).

C. Special algorithms

Special algorithms were used to correct the wind speed and direction for ship course, speed, heading and roll; to calculate saturation vapor pressure from TDP; to calculate TDP from RH; to calculate σ_T .

1. Roll correction and TWIND

HW = height of wind sensor in m

DT = time interval between data scans in sec

ROLL = roll sensor in degrees - current scan

ROLLL = roll sensor in degrees - previous scan

WS - measured wind speed in m/sec

WD - measured wind direction in degrees

Roll velocity, VR:

$$VR = (1.943 \cdot HW \cdot (ROLL - ROLLL) / (DT \cdot 57.926)) \cdot 6.0$$

Across ship wind speed (WMX):

$$WMX = WS \cdot \sin(WD/57.296) - VR$$

Along ship wind speed (WMY):

$$WMY = WS \cdot \cos(WD/57.926)$$

Roll corrected wind speed (WS') & direction (WD'):

$$WS' = [WMX^2 + WMY^2]^{1/2}$$

$$WD' = \arctan(WMY/WMX)$$

Ship motion correction to wind:

SPEED = ship speed in kts

COURSE = ship course in degrees

HDG = ship heading in degrees

DIR = wind direction in degrees (WD')

SPD = wind speed in knots (WS')

TWD = corrected wind direction in degrees

TWS = corrected wind speed in knots

Subroutine TWIND*

ATWIND T=00003 IS ON CR00031 USING 00002 BLKS R=0000

```
0001  FTN,L
0002      SUBROUTINE TWIND(SPEED,COURSE,HDG,DIR,SPD,TWD,TWS)
0003      D=(HDG+DIR)*3.14159/180.0
0004      C=COURSE*3.14159/180.0
0005      SVX=SPEED*COS(C)
0006      SVY=SPEED*SIN(C)
0007      TWX=SPD*COS(D)-SVX
0008      TWY=SPD*SIN(D)-SVY
0009      TWS=SQRT(TWX*TWX+TWY*TWY)
0010      TWD=ATAN2(TWY,TWX)*180.0/3.14159
0011      IF(TWD.LT.0.0)TWD=TWD+360.0
0012      RETURN
0013      END
0014      END*
```

2. Saturation vapor pressure from dew point or dew point from saturation vapor pressure

IPOLY = 1: DIN = Saturation vapor pressure in mbar

DOUT = Dew point in deg C

*Dean Clamons, NRL Code 5003 developed this subroutine

IPOLY = 2: DIN = Dew point in deg C

DOUT = Saturation vapor pressure in mbar

The polynomials in SPOLY were obtained by fitting data from List (1966).

4SPOLY T=00003 IS ON CR00033 USING 00005 BLKS R=0000

```
0001 FTN7X,L
0002 SUBROUTINE SPOLY(DIN,DOUT,IPOLY),1962 Cruise E(t) and T(e)
0003 C *
0004 REAL*8 DIN ! Double precision input to subroutine
0005 REAL*8 DOUT ! Double precision output from subroutine
0006 INTEGER IPOLY ! Operational mode of subroutine
0007 REAL*8 D0,D1,D2,D3,D4,D5 ! Coefficients
0008 C *
0009 C * E(t) Saturation vapor pressure from dew point
0010 C *
0011 IF (IPOLY.EQ.1) THEN
0012 D0=6.1183482D0
0013 D1=0.42750748D0
0014 D2=0.0169417D0
0015 D3=0.0001191286D0
0016 D4=0.00000618443D0
0017 DOUT=D0+(D1*DIN)+(D2*DIN*DIN)+(D3*DIN**3)+(D4*DIN**4)
0018 END IF
0019 C *
0020 C * T(e) Dew point from saturation vapor pressure
0021 C *
0022 IF (IPOLY.EQ.2) THEN
0023 D0=-12.304D0
0024 D1=2.42893D0
0025 D2=-0.0626510D0
0026 D3=0.000936792D0
0027 D4=-0.00000689041D0
0028 D5=1.93622D-8
0029 DOUT=D0+(D1*DIN)+(D2*DIN**2)+(D3*DIN**3)+(D4*DIN**4)+
0030 2 (D5*DIN**5)
0031 C *
0032 C * To correct for bad fit of T(e) polynomial to table
0033 C *
0034 IF (DOUT.LT.16.0) THEN
0035 DOUT=0.86+0.95*DOUT
0036 ELSE
0037 DOUT=DOUT+0.01*(DOUT-22.0)**2-0.31
0038 END IF
0039 C *
0040 END IF
0041 C *
0042 RETURN
0043 END
```

3. To calculate dewpoint from relative humidity:

RH = relativity humidity in percent

R = mixing ratio over water in gm/gm

$R = (RH/100) \cdot (.62197 \cdot E(TA)/(PA - E(TA)))$

$E(TDP) = R \cdot PA / (.62197 + R)$

Use SPOLY with IPOLY = 1 to obtain E(TA) and E(TDP).

To calculate sea water sigma-T:

T = temperature in deg C

S = salinity in ‰

σ_T = sigma-T in gm/cm³

$$\sigma_T = 29.42 - .270T - .0042(T-21)^2 + (.7954 - .00162T) \cdot (S-34)$$

This is a quadratic fit to the data in Stommel, 1965.

D. Background Variance Procedure

A running background variance check was implemented on 20 of the 24 data channels. In the check, a 30-point (60 sec) running background variance was divided by the long-term variance for the channel and the ratio is then compared to a threshold. If the threshold is exceeded, the channel is identified as noisy and a record of the violation is written to disk. The thresholds are initially set by the user and can be altered at any time by using the program SALTR to independently modify each of the data channel thresholds. (Munch and Kaiser, 1983). Total violations for every 15 minutes are recorded on disk and appear on the 15 minute data summary hardcopy. The current background variance and thresholds for each channel also appear on the printout.

The algorithm to perform the variance check was executed on each of the 20 channels of data. Thus, in actuality, during each 1 minute variance check, 20 variance ratios are calculated and compared with 20 independent threshold values and if necessary, the running background variance must be updated. For the first one hundred minutes the background variance is assumed to be a simple average of the variance. The algorithm to perform the variance check on only one channel is outlined below.

The running variance,

$$V_S = \frac{1}{30} \sum_{i=1}^{30} (x_i - \bar{x})^2, \quad x_i = 2 \text{ -second data value}$$

if $N < 100$, the background variance

$$V_B = \frac{1}{N} \sum_{i=1}^N V_S,$$

where N is the number of minutes (sets of 30 data points),

$$\text{If } \frac{V_S}{V_B} > T, v = v + 1,$$

where T is the channel threshold and v is the number of violations.
For $N > 100$, V_B is calculated as follows:

$$\frac{V_S}{V_B} < T, V_B = .99 V_B + .01 V_S;$$

else $V_B = V_B, v = v + 1.$

Table 4. 1 One-minute Average Variables

<u>Variable</u>	<u>Source</u>	<u>Description</u>
TA	$\overline{TA1}$ or $\overline{TA2}$	Air temperature, °C
TDP	$\overline{TDP1}$ or $\overline{RH(TDP2)}$	*Air dew point, °C
WD	Roll correction and	
	\overline{TWIND} (WS, WD, HDG, CSE, SPEED)	*True wind direction, deg
WS 22.5	Roll correction and	True wind speed at
	\overline{TWIND} (WS, WD, HDG, CSE, SPEED)	22.5m, m/sec
WS	WS 22.5/[1 = .076 ln(HW/10)]	True windspeed at 10m, m/sec
TS	\overline{TS}	water temperature, °C
SIGT	\overline{SIGMA} (TS, CS)*	water sigma-T, gm/cm ³
$\left. \begin{matrix} E(TA) \\ E(TDP) \\ E(TS) \end{matrix} \right\}$	$\overline{E}(T)^*$	saturation vapor pressure of air at temperature T, mbar
PA	operator	atmospheric pressure, mbar
HW	operator	Height of anemometer, m
CD	$(0.061 + 0.063 \overline{WS}) \times 10^{-3}$	
TVA	$[TA + 273.15] \left[1 + \frac{E(TDP)}{PA - E(TDP)} \right] / \left[1 + \frac{.62197 E(TDP)}{PA - E(TDP)} \right] - 273.15$	
RHO	$3.4838 \times 10^{-4} PA/TVA$	

*The subroutines/functions RH, TWIND, SIGMA, E and roll correction to wind are described in 4. C.

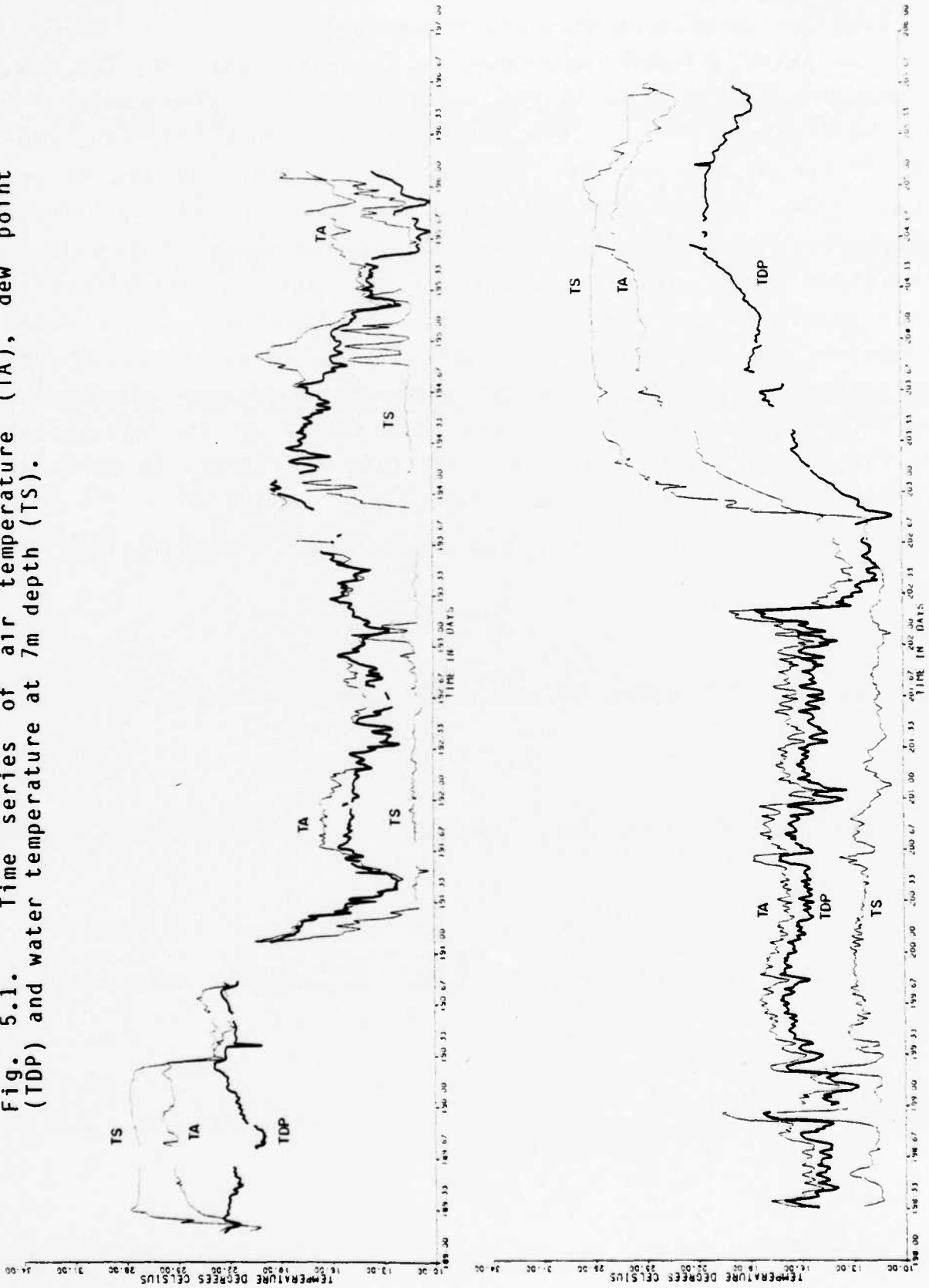
Table 4. 2 15-minute average Parameters

Average Parameter	$f(\bar{x})$
RMS ROLL	$(\text{ROLL}^2)^{1/2}$
CE	1.32×10^{-3}
USTAR	$100\text{WS}(\text{CD})^{1/2}$
RH	$E(\text{TA})[\text{PA}-E(\text{TA})]/E(\text{TA})[\text{PA}-E(\text{TDP})]$
TVW	$[\text{TA} + 273.15] \left[1 + \frac{E(\text{TS})}{\text{PA}-E(\text{TS})} \right] / \left[\frac{.62197E(\text{TDP})}{\text{PA}-E(\text{TS})} \right] - 273.15$
TAU	$\text{RH0}[\text{USTAR}]^2$
H	$1046.4 [8.7 + .99 \cdot (\text{TS}-\text{TA}) \cdot \text{WS}]\text{RH0}$
CH	$\text{H}/[1046.4 \text{RH0} \cdot (\text{TS}-\text{TA}) \cdot \text{WS}]$
E	$1.515 \times 10^9 \cdot \text{RH0} \cdot \text{CE} \cdot \text{WS}[E(\text{TS})-E(\text{TDP})]/\text{PA}$
QW	$.621 E(\text{TS})/\text{PA}$
QA	$.621 E(\text{TA})/\text{PA}$
L	$-.267 [\text{TA} + 273.15] \cdot [\text{USTAR}]^3 \text{RH0}/\text{H}$
Z0	$[\text{USTAR}]^2/79,380$

V. Time Series of Variables and Parameters

The basic data of importance to the phenomena (TA, TDP, TW, WS and WD) is displayed in Figs. 5.1 and 5.2 as time series for each half of the cruise. The important parameters (U^* , TAU, TVA-TVW, H and E) are plotted in Figs. 5.3 to 5.6. WD and WS are true. The variables and parameters plotted are 15 minute averages. TVA-TVW is a measure of the stability of the lower atmosphere - the virtual temperature accounts for the effect of water vapor on the density of air. If $TVA-TVW < 0$ the lower atmosphere is convectively unstable. The calculations of U^* , TAU, H and E are based on measurements over both stable and unstable conditions. The largest deviations of the calculated U^* , TAU, H and E from the true conditions are likely to occur at very small U^* , below about 10 cm/sec, when $TVA-TVW < 0$.

Fig. 5.1. Time series of air temperature (TA), dew point (TDP) and water temperature at 7m depth (TS).



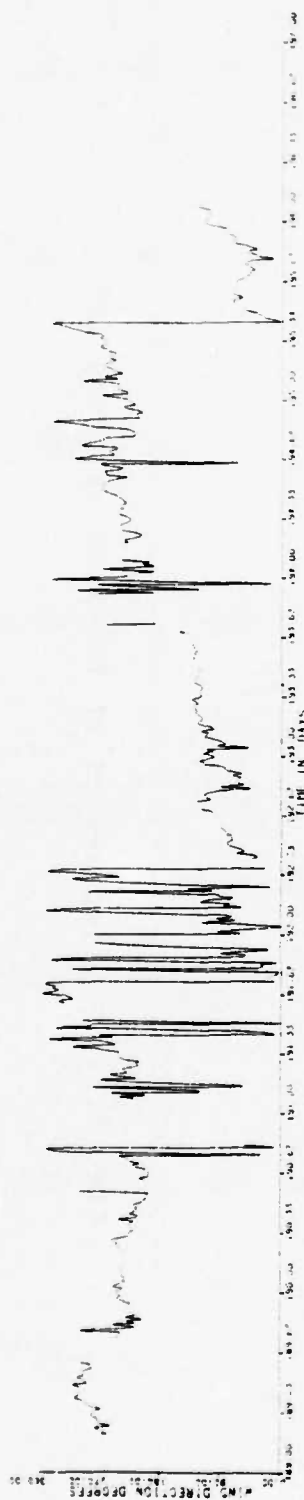
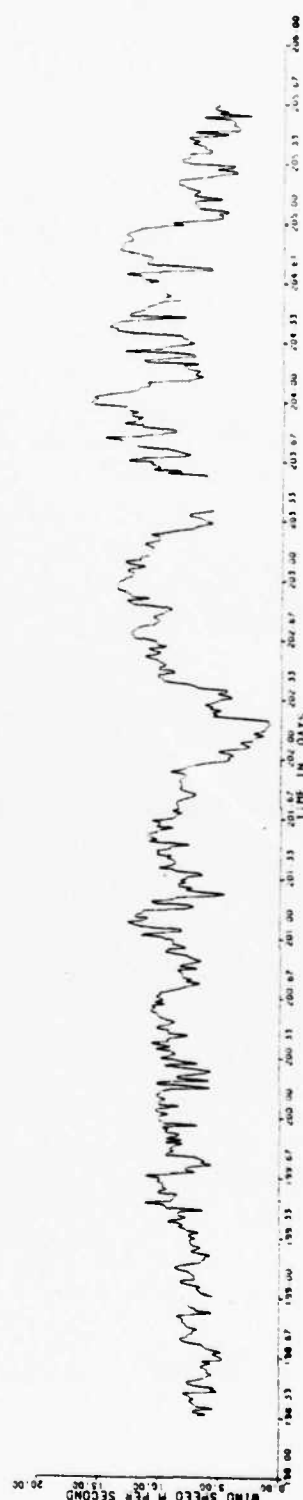
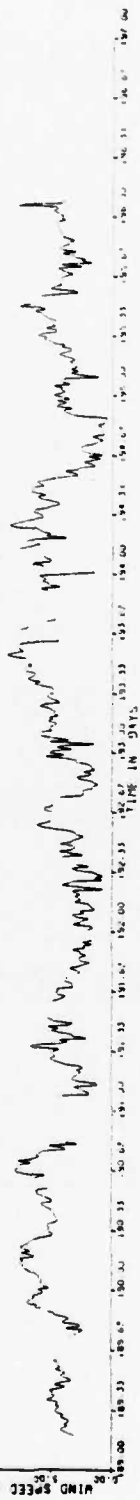


Fig. 5.2. Time series of true wind speed (WS) and true wind direction (WD).



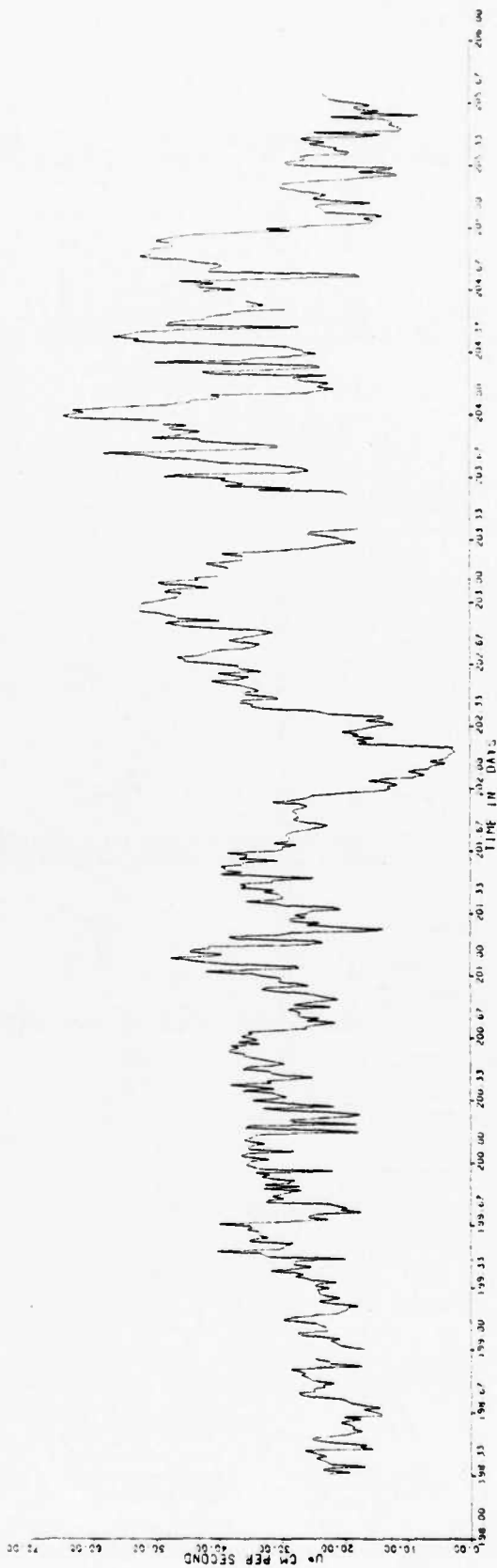
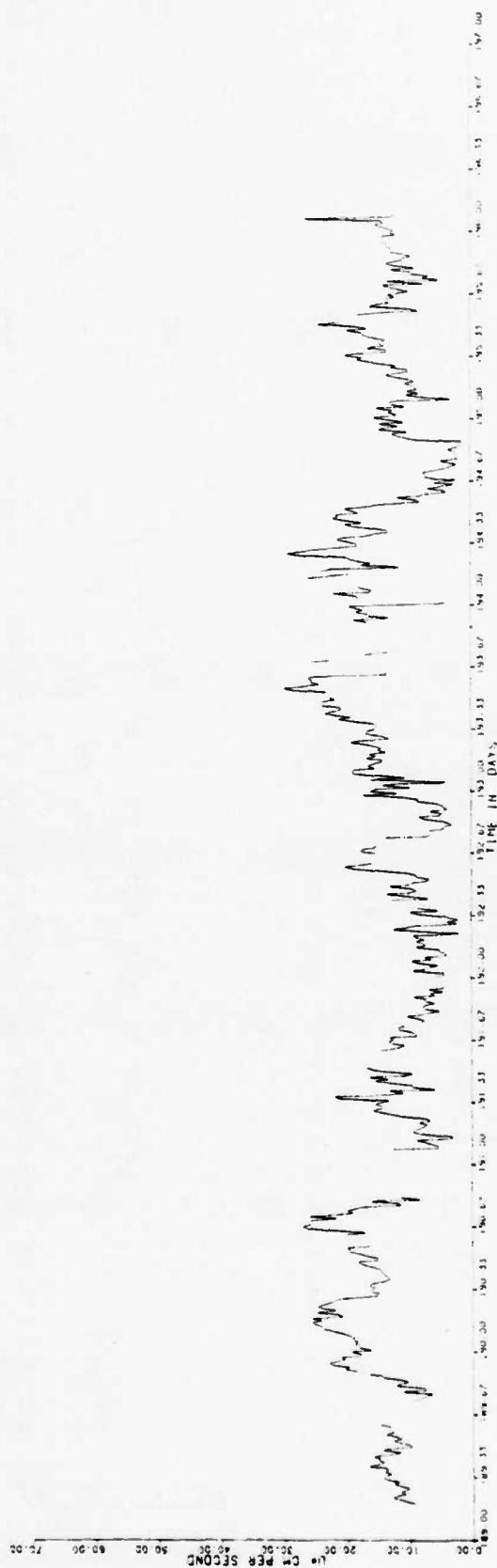


Fig. 5.3. Time series of friction velocity (U^*).

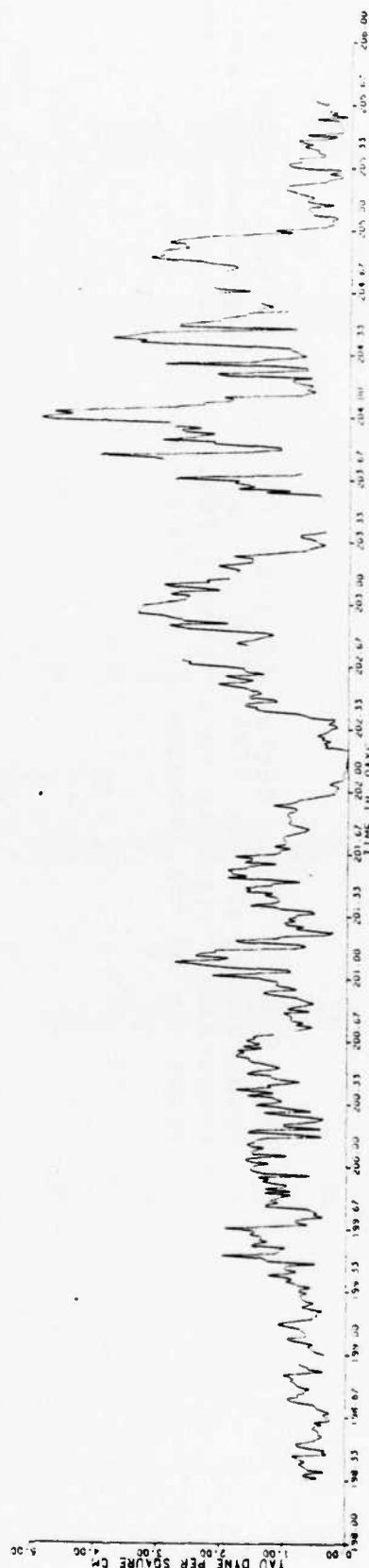


Fig. 5.4. Time series of wind stress (TAU).

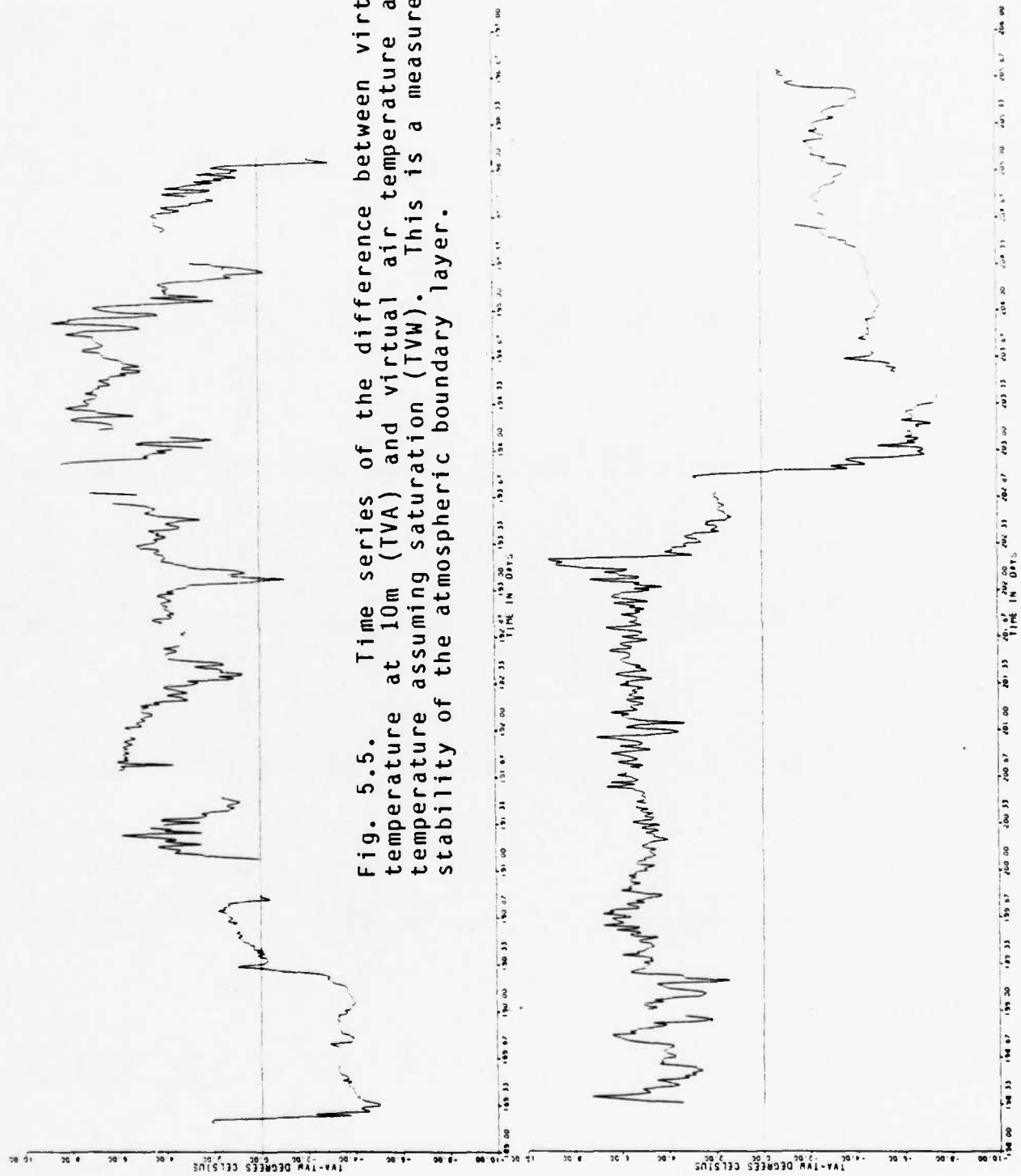
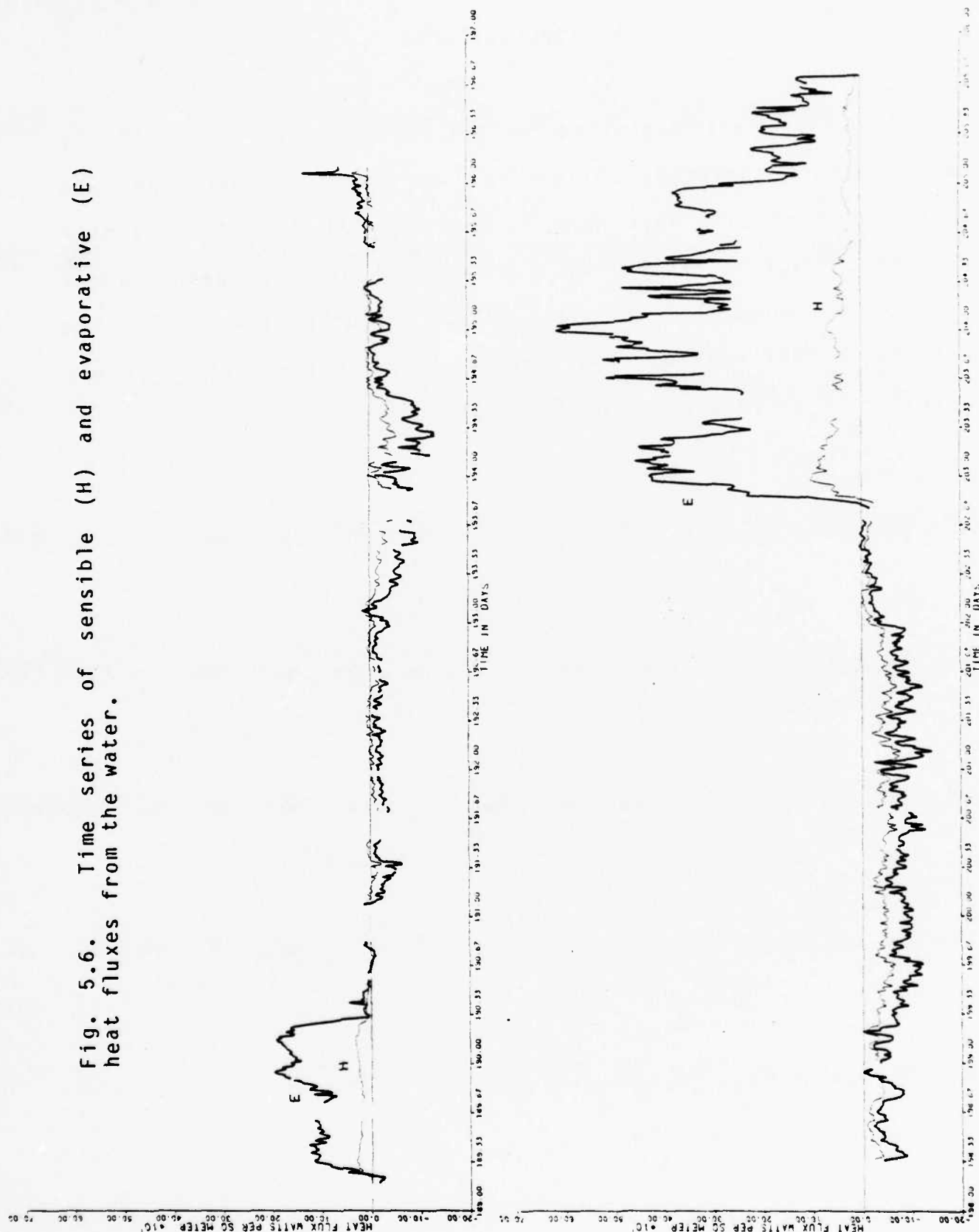


Fig. 5.5. Time series of the difference between virtual air temperature at 10m (TVA) and virtual air temperature at water temperature assuming saturation (TVW). This is a measure of the stability of the atmospheric boundary layer.

Fig. 5.6. Time series of sensible (H) and evaporative (E) heat fluxes from the water.



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APPENDIX A: Physical Variable Summary

The basic physical variables which were measured during the experiment are tabulated in time here. The entries are 15-minute averages. The quantities are:

<u>Quantity</u>	<u>Description</u>	<u>Units</u>
DTG,Z	Julian day/Greenwich time	day/hour,min.
TA	Air temperature	°C
TDP	Air dew point	°C
TS	Water temperature at -7m	°C
SAL	Water salinity at -7m	°/oo
SIGT	($\rho - 1$) $\times 10^3$, ρ =water density	gm/cm ³
WS	True wind speed corrected for ship motion, heading and roll	m/sec
WD	True wind direction corrected for ship motion, heading and roll	deg
SHIPS	True ship speed	m/sec
CSE	True ship course	deg
HDG	Ship heading	deg
LAT	Latitude	deg,min
LONG	Longitude	deg,min

15 MINUTE AVERAGES DATA

DATE	Z	LO	TOP	TS	SL	SLT	WS	WD	WINDS	ESF	161	161	161
		degC	degC	degC	mm	g/cm ³	m/sec	cm	m/sec	deg	deg	deg	deg
109/0406	22.07	22.30	22.29	22.29	34.071	23.440	4.5	267	8.1	94	37	37	71 26 73 0
109/0437	22.74	22.36	21.00	21.00	34.013	23.769	3.2	266	6.9	92	37	37	71 18 27 0
109/0452	22.60	22.20	20.05	20.05	33.090	23.712	3.6	269	6.9	91	37	37	71 14 07 0
109/0502	22.33	22.13	20.42	20.42	33.904	23.024	5.9	268	6.9	91	37	37	71 9 10 0
109/0522	22.01	21.94	20.24	20.24	33.050	23.043	4.3	269	7.0	90	37	37	71 5 60 0
109/0537	21.48	21.50	21.27	21.27	33.079	23.503	4.1	272	6.9	100	37	37	71 1 36 0
109/0552	21.43	21.50	22.25	22.25	34.055	23.447	3.7	270	6.4	100	37	37	70 57 25 0
109/0607	21.06	21.92	24.99	24.99	35.087	23.002	4.0	275	6.5	104	37	37	70 53 59 0
109/0622	22.20	22.34	24.17	24.17	35.400	23.910	3.6	270	6.6	106	37	37	70 49 55 0
109/0637	22.35	22.30	25.03	25.03	35.279	23.557	3.6	275	6.8	106	37	37	70 45 05 0
109/0652	22.78	22.42	26.46	26.46	35.039	23.534	4.0	273	6.9	92	37	37	70 41 22 0
109/0707	23.46	22.29	26.00	26.00	35.043	23.413	4.3	276	6.0	94	37	37	70 37 04 0
109/0722	23.76	22.10	26.00	26.00	35.043	23.402	4.1	280	6.0	93	37	37	70 32 09 0
109/0737	23.04	22.20	27.00	27.00	35.044	23.337	4.6	284	6.7	105	37	37	70 29 04 0
109/0752	24.02	22.20	27.26	27.26	35.044	23.115	4.0	282	6.6	104	37	37	70 20 26 0
109/0807	24.15	22.11	27.06	27.06	35.045	23.083	4.6	279	6.6	103	37	37	70 20 26 0
109/0822	24.23	22.05	27.62	27.62	35.044	23.139	4.4	269	6.6	103	37	37	70 20 26 0
109/0837	24.37	22.13	27.53	27.53	35.044	23.108	4.7	282	6.7	97	37	37	70 14 07 0
109/0852	24.46	22.13	27.40	27.40	35.044	23.208	4.5	287	6.0	101	37	37	70 0 61 0
109/0907	24.51	22.02	27.40	27.40	35.031	23.199	4.6	291	6.9	103	37	37	70 4 47 0
109/0922	24.61	22.00	27.41	27.41	35.043	23.194	5.4	295	5.0	103	37	37	70 71 0
109/0937	24.65	22.00	27.41	27.41	35.043	23.162	4.9	287	9	33	37	37	69 59 10 0
109/0952	24.63	22.11	27.41	27.41	35.043	23.162	4.9	300	9	33	37	37	69 59 51 0
109/1007	24.67	22.04	27.39	27.39	35.044	23.235	5.0	304	8	26	37	37	69 59 52 0
109/1022	24.72	21.96	27.39	27.39	35.043	23.235	4.9	300	7	25	37	37	69 59 10 0
109/1037	24.75	21.63	27.39	27.39	35.043	23.235	5.2	304	7	23	37	37	69 50 24 0
109/1052	24.83	21.62	27.39	27.39	35.043	23.236	4.3	302	10	23	37	37	69 50 24 0
109/1100	24.92	21.07	27.39	27.39	35.043	23.235	3.9	303	8	22	37	37	69 50 54 0
109/1130	25.03	21.66	27.39	27.39	35.043	23.236	4.8	300	9	26	37	37	69 50 32 0
109/1153	24.05	21.26	27.39	27.39	35.042	23.230	4.3	313	1.0	50	37	37	69 50 03 0
109/1200	25.19	21.61	27.35	27.35	35.932	23.315	3.4	269	3.7	193	37	37	69 52 73 0
109/1223	24.92	21.45	27.35	27.35	35.994	23.363	3.5	254	9	69	37	37	69 52 51 0
109/1230	24.96	21.45	27.34	27.34	35.994	23.364	4.0	277	0	20	37	37	69 52 27 0
109/1253	25.05	21.43	27.34	27.34	35.996	23.366	3.9	306	9	126	37	37	69 52 04 0
109/1300	25.21	21.67	27.34	27.34	35.997	23.366	4.2	296	8	24	37	37	69 56 23 0
109/1323	25.27	21.77	27.34	27.34	35.997	23.366	4.6	298	9	50	37	37	69 56 27 0
109/1330	25.26	21.66	27.34	27.34	35.996	23.366	4.3	298	9	79	37	37	69 56 46 0
109/1353	25.20	21.02	27.34	27.34	35.994	23.365	4.4	202	9	31	37	37	69 56 19 0
109/1400	25.30	21.73	27.34	27.34	35.991	23.363	4.5	204	0	23	37	37	69 55 25 0
109/1423	25.24	21.69	27.34	27.34	35.986	23.360	4.4	205	9	29	37	37	69 55 71 0
109/1430	25.28	21.06	27.34	27.34	35.987	23.360	4.9	209	1.1	102	37	37	69 55 43 0
109/1450	25.42	20.48	27.35	27.35	35.966	23.340	3.4	233	1.1	30	37	37	69 55 25 0
109/1503	25.42	20.57	27.35	27.35	35.963	23.341	3.2	246	1.2	25	37	37	69 59 20 0
109/1518	25.76	20.14	27.33	27.33	35.966	23.349	2.9	246	1.3	41	37	37	69 58 10 0
109/1523	26.00	19.94	27.35	27.35	35.970	23.344	2.7	241	1.2	34	37	37	69 58 30 0
109/1530	25.09	20.23	27.39	27.39	35.969	23.332	2.4	240	1.2	166	37	37	69 57 59 0
109/1553	25.06	19.90	27.40	27.40	35.998	23.351	3.0	302	2.5	90	37	37	69 57 10 0

15. NUBBLE W/REGDS: Data

DBS, Z	LA degE	TDP degE	15 degE	SAL ppt	SIGT g/cm ³	W5 m/sec	W0 deg	SHIPS m/sec	USE deg	HB5 deg	LAT deg min	LONG deg min
109/1900	25.00	20.12	27.432	35.997	23.339	2.6	235	7	24	215	37 35.41 N	69 52.13 W
109/1923	25.14	19.94	27.500	36.003	23.319	2.0	219	1.3	29	219	37 35.41 N	69 52.13 W
109/1930	25.27	20.09	27.516	36.003	23.316	4.2	253	1.9	23	204	37 32.07 N	69 52.13 W
109/1953	25.39	19.99	27.520	36.000	23.310	3.9	210	1.5	24	195	37 32.07 N	69 52.13 W
109/2000	25.70	20.13	27.542	36.000	23.305	3.6	232	2.4	195	329	37 32.07 N	69 52.13 W
109/2023	25.66	20.12	27.526	36.030	23.333	3.9	200	5.0	354	350	37 40.24 N	69 52.62 W
109/2030	25.69	20.47	27.549	36.039	23.343	4.0	234	5.0	259	350	37 43.07 N	69 52.62 W
109/2053	25.75	20.46	27.616	36.050	23.319	4.0	210	6.1	356	350	37 45.20 N	69 50.04 W
109/2100	25.70	20.63	27.663	36.054	23.306	5.4	222	6.1	357	350	37 40.97 N	69 50.20 W
109/2120	25.00	21.02	27.662	36.044	23.299	5.9	235	6.2	351	349	37 52.04 N	69 50.17 W
109/2143	25.86	21.13	27.662	36.022	23.282	6.4	235	6.1	280	341	37 55.95 N	69 50.72 W
109/2150	25.90	21.14	27.773	36.036	23.256	6.9	233	5.0	350	326	37 50.05 N	69 59.22 W
109/2213	25.80	21.32	27.837	36.046	23.249	6.9	227	1.6	24	156	30 10.00 N	69 59.11 W
109/2220	26.02	21.19	27.787	36.047	23.250	7.1	226	1.9	52	129	30 10.00 N	69 50.17 W
109/2243	25.92	21.21	27.760	36.047	23.269	6.7	234	1.9	51	114	30 13.35 N	69 52.29 W
109/2250	25.03	21.46	27.785	36.049	23.263	6.4	231	1.9	51	91	30 13.93 N	69 56.54 W
109/2313	25.90	21.36	27.824	36.052	23.252	6.6	246	1.0	51	59	30 2.52 N	69 55.41 W
109/2320	25.63	21.32	27.833	36.054	23.250	5.0	241	1.6	43	210	30 3.14 N	69 54.21 W
109/2343	25.51	21.43	27.788	36.049	23.261	5.0	247	1.9	61	190	30 3.46 N	69 53.26 W
109/2350	25.62	21.57	27.760	36.040	23.267	6.2	240	1.0	57	133	30 3.99 N	69 52.07 W
190/0013	25.34	21.38	27.741	36.049	23.277	5.3	243	0	61	232	30 4.31 N	69 52.20 W
190/0020	25.29	21.45	27.749	36.049	23.274	5.0	230	1.0	66	229	30 4.47 N	69 51.27 W
190/0043	25.31	21.66	27.751	36.049	23.273	5.0	253	1.0	31	290	30 4.02 N	69 51.27 W
190/0050	25.26	21.65	27.820	36.050	23.250	6.0	245	2.4	7	316	30 6.06 N	69 51.27 W
190/0113	25.29	21.47	27.804	36.069	23.244	5.9	241	1.9	0	304	30 7.00 N	69 51.06 W
190/0120	25.31	21.40	27.870	36.076	23.252	6.1	235	1.5	7	292	30 7.07 N	69 50.53 W
190/0143	25.34	21.66	27.877	36.066	23.259	6.1	236	1.3	7	209	30 8.53 N	69 50.06 W
190/0150	25.37	21.63	27.878	36.087	23.260	6.2	235	1.4	7	209	30 9.21 N	69 50.06 W
190/0213	25.30	21.69	27.870	36.085	23.259	6.4	241	1.4	9	290	30 9.00 N	69 50.06 W
190/0220	25.40	21.99	27.873	36.082	23.258	6.4	239	1.1	15	276	30 10.49 N	69 50.53 W
190/0243	25.39	22.15	27.866	36.079	23.258	7.1	239	1.9	31	260	30 10.91 N	69 50.06 W
190/0250	25.45	22.21	27.858	36.074	23.257	7.4	240	1.9	20	260	30 11.30 N	69 49.99 W
190/0313	25.49	22.21	27.856	36.073	23.256	7.3	242	1.9	34	268	30 11.67 N	69 49.23 W
190/0320	25.47	22.08	27.857	36.070	23.254	7.6	238	1.9	29	260	30 12.05 N	69 49.45 W
190/0343	25.47	22.13	27.857	36.064	23.250	7.7	235	0	22	269	30 12.44 N	69 49.21 W
190/0350	25.46	22.10	27.834	36.060	23.254	7.4	236	1.3	12	296	30 12.93 N	69 49.06 W
190/0413	25.43	22.17	27.727	35.968	23.231	7.7	230	1.0	11	306	30 13.70 N	69 40.01 W
190/0430	25.50	22.11	27.645	35.796	23.139	6.5	237	0	104	252	30 14.23 N	69 40.01 W
190/0443	25.70	22.20	27.662	35.650	23.003	6.7	237	0	249	251	30 14.13 N	69 49.11 W
190/0450	25.05	22.37	27.660	35.616	22.970	7.6	230	0	295	262	30 14.10 N	69 49.47 W
190/0513	25.93	22.39	27.661	35.569	22.943	6.0	236	0	275	253	30 14.20 N	69 49.04 W
190/0520	26.01	22.50	27.662	35.695	23.037	7.3	240	0	282	263	30 14.29 N	69 50.17 W
190/0544	25.70	22.66	27.605	35.629	23.006	7.5	241	1.0	337	299	30 14.05 N	69 50.17 W
190/0559	25.60	22.92	27.382	35.458	22.951	7.3	243	2.9	348	320	30 16.11 N	69 59.23 W
190/0619	25.46	22.96	27.003	35.377	22.907	6.9	249	2.5	293	317	30 17.41 N	69 51.27 W
190/0629	25.46	22.90	26.451	35.358	23.125	6.0	244	3.3	330	307	30 10.72 N	69 51.27 W
190/0644	25.62	22.92	25.815	35.358	23.326	6.5	251	3.6	314	301	30 19.90 N	69 51.27 W
190/0659	25.66	22.90	25.597	35.350	23.444	5.6	255	4.4	309	305	30 21.30 N	69 55.30 W

15 MINUTE AVERAGE DATA

DIG, Z	TA degC	TDP degC	TS degC	SAL ppt	SIGT g/cm**3	WS m/sec	WD deg	SDIPS m/sec	CSF deg	HDC deg	LAT deg mins	LONG deg mins
190/0714	24.47	22.60	24.214	35.358	23.866	5.0	242	4.8	336	335	30 23.15 N	69 56 95 W
190/0729	23.55	22.24	22.468	35.350	24.375	4.9	228	5.1	344	343	30 25.54 N	69 57 03 W
190/0744	23.07	22.21	22.410	35.358	24.392	5.3	227	4.0	352	347	30 27.94 N	69 50 37 W
190/0759	22.93	22.27	22.911	35.358	24.240	5.3	229	2.9	335	327	30 29.63 N	69 59 03 W
190/0814	22.90	22.28	22.970	35.358	24.229	5.1	220	.0	207	200	30 30.18 N	69 59 47 W
190/0829	22.90	22.29	23.037	34.967	23.915	5.4	223	.5	00	127	30 30.19 N	69 59 23 W
190/0844	22.92	22.27	23.050	34.449	23.216	5.3	227	.5	65	112	30 30.27 N	69 50 93 W
190/0859	22.91	22.25	22.962	34.294	23.427	4.7	225	.6	72	97	30 30.36 N	69 58 50 W
190/0914	23.04	22.21	22.016	34.228	23.419	4.5	228	.4	67	56	30 30.44 N	69 50 32 W
190/0929	23.08	22.19	22.791	34.274	23.461	4.6	220	.4	65	36	30 30.53 N	69 50 07 W
190/0944	23.09	20.12	22.772	34.304	23.550	4.7	245	.5	110	100	30 30.63 N	69 57 09 W
190/0959	22.90	21.00	22.532	34.099	23.402	4.8	217	1.2	172	103	30 30.63 N	69 57 25 W
190/1014	22.95	21.69	22.814	34.403	23.552	4.8	214	.4	155	111	30 30.66 N	69 57 20 W
190/1029	22.89	21.63	22.392	34.195	23.514	4.9	227	.6	169	207	30 31.15 N	69 57 74 W
190/1044	22.87	21.62	22.413	34.344	23.621	5.1	219	1.3	342	329	30 31.07 N	69 50 06 W
190/1059	22.89	21.66	22.477	34.535	23.749	5.5	220	1.3	341	316	30 32.50 N	69 50 41 W
190/1114	23.80	21.70	22.373	34.563	23.799	5.0	214	.6	197	200	30 32.59 N	69 50 43 W
190/1129	23.13	21.73	22.507	34.527	23.734	5.9	219	.6	169	207	30 32.29 N	69 50 46 W
190/1144	23.14	21.75	22.297	34.453	23.737	5.0	221	2.0	335	336	30 32.59 N	69 50 43 W
190/1159	22.87	21.65	21.995	34.506	23.861	5.0	209	4.4	349	349	30 34.51 N	69 50 90 W
190/1214	22.79	21.64	21.904	31.690	24.027	5.4	207	4.5	351	347	30 36.65 N	69 59 37 W
190/1229	22.74	21.63	21.740	35.085	24.373	5.0	203	4.0	352	352	30 38.90 N	69 59 01 W
190/1244	22.88	21.69	22.034	35.460	24.575	6.2	201	5.2	355	354	30 41.42 N	70 13 W
190/1259	22.90	21.74	22.031	35.448	24.567	6.2	199	5.2	354	354	30 43.06 N	70 41 W
190/1314	23.01	21.74	21.936	35.338	24.510	6.3	199	5.1	354	355	30 44.47 N	70 50 W
190/1329	23.07	21.80	22.142	35.362	24.471	5.3	303	5.1	354	167	***	***
190/1443	23.30	21.86	22.103	35.214	24.370	6.5	203	1.0	169	194	30 59.97 N	70 59 W
190/1458	23.14	21.95	22.105	35.215	24.370	6.3	205	.9	167	181	30 59.83 N	70 55 W
190/1513	23.55	22.02	22.101	35.233	24.401	5.6	213	1.5	191	201	30 59.14 N	70 13 W
190/1544	23.30	22.05	22.104	35.244	24.391	7.9	199	.5	131	138	30 58.59 N	70 10 W
190/1559	23.47	22.08	22.122	35.244	24.386	0.1	199	.4	60	119	30 58.62 N	70 20 W
190/1614	23.54	22.10	22.133	35.243	24.383	7.0	202	.5	68	96	30 58.70 N	70 50 W
190/1629	23.61	22.15	22.156	35.243	24.377	7.0	205	.4	61	103	30 58.84 N	69 59 28 W
190/1644	23.72	22.23	22.181	35.243	24.370	7.8	210	.6	95	146	30 50.90 N	69 59.71 W
190/1659	23.96	22.32	22.163	35.243	24.375	6.8	224	.5	214	243	30 58.69 N	69 59.78 W
190/1714	23.67	22.39	22.199	35.243	24.364	7.9	213	.5	90	179	30 58.71 N	69 59.75 W
190/1729	23.63	22.45	22.091	35.251	24.401	6.6	227	.4	127	239	30 58.58 N	69 59.56 W
190/1744	23.56	22.49	22.198	35.243	24.364	6.1	230	.4	120	222	30 58.60 N	69 59.45 W
190/1759	23.52	22.53	22.265	35.236	24.341	6.3	234	.7	130	206	30 58.57 N	69 59.33 W
190/1814	23.63	22.53	22.264	35.239	24.343	6.0	244	.3	147	328	30 58.63 N	69 59.34 W
190/1829	23.30	22.40	22.335	35.238	24.322	5.7	30	3.9	352	110	30 59.63 N	69 59.39 W
190/1844	22.96	22.05	22.375	35.216	24.294	3.9	321	3.9	343	166	39 1.76 N	69 59.75 W
190/1859	22.01	21.75	22.294	35.178	24.288	4.1	345	.5	244	200	39 2.25 N	70 19 W
190/1914	22.22	21.54	22.260	35.181	24.300	5.3	359	.3	154	252	39 2.14 N	70 17 W
190/1929	22.42	21.63	22.260	35.190	24.307	3.0	11	.3	160	295	39 2.01 N	70 10 W
190/1944	22.39	21.47	22.239	35.176	24.382	3.9	57	3.0	00	24	39 2.78 N	69 59.22 W
191/0154	20.63	19.55	20.422	34.496	24.283	4.4	216	5.1	14	15	39 59.92 N	69 40.01 W

15 MINUTE AVERAGE DATA

DATE, Z	TA	TDP	TS	SAL	SIBT	WS	WD	SHIPS	USE	DBG	LAT	LONG
	degC	degC	degC	ppt	q/cm**3	m/sec	deg	m/sec	deg	deg	deg	min
191/0209	20.07	19.24	18.569	33.924	24.391	1.9	245	5.1	13	15	40	2 35 N
191/0224	19.47	18.95	17.339	33.127	24.015	2.6	204	5.2	12	15	40	4 03 N
191/0239	19.29	18.28	17.048	33.125	24.079	2.4	256	5.1	13	15	40	2 22 N
191/0254	18.97	18.54	15.746	32.966	24.265	2.7	124	5.2	13	15	40	9 74 N
191/0309	18.39	18.11	15.325	32.775	24.203	3.1	134	5.0	12	17	40	12 17 N
191/0324	18.35	18.14	15.353	32.755	24.101	1.2	204	4.2	30.3	31.0	40	13 00 N
191/0339	18.24	17.89	14.679	32.047	24.399	1.3	52	4.0	32.0	33.2	40	15.58 N
191/0354	18.24	17.90	14.310	32.108	24.400	2.9	00	4.0	22.6	19.6	40	17 21 N
191/0409	18.39	18.10	15.099	32.311	23.095	3.3	222	5.0	33	35	40	19.00 N
191/0424	18.02	17.25	15.797	32.100	23.640	3.2	223	5.1	34	35	40	21.02 N
191/0439	17.96	17.70	14.694	32.305	24.039	2.9	243	5.1	35	35	40	23.94 N
191/0454	17.99	17.75	14.352	32.618	24.292	2.7	243	5.1	34	35	40	26.03 N
191/0509	17.92	17.70	14.764	32.512	24.172	2.6	258	5.1	34	35	40	28.09 N
191/0524	17.24	17.02	13.562	32.370	24.265	3.0	231	3.4	22	35	40	29.09 N
191/0539	16.99	16.05	12.423	31.959	24.175	2.4	234	3.0	31	35	40	30.75 N
191/0554	17.42	17.37	12.127	31.966	24.237	2.6	239	4.6	22	31	40	32.26 N
191/0609	16.13	16.09	11.891	32.087	24.376	3.9	224	5.1	31	32	40	34.42 N
191/0624	14.84	14.46	12.634	32.071	24.344	4.4	214	5.0	32	31	40	36.53 N
191/0639	15.73	15.85	12.075	32.091	24.344	4.9	220	5.1	33	33	40	38.64 N
191/0655	14.99	15.17	11.607	32.114	24.451	5.2	213	4.7	33	36	40	40.69 N
191/0710	15.13	15.31	11.806	31.961	24.465	4.0	236	1.9	51	45	40	41.60 N
191/0725	14.77	15.24	11.080	32.067	24.513	4.9	242	2.7	41	40	40	42.43 N
191/0740	14.24	15.00	11.019	32.119	24.564	4.0	244	1.9	54	50	40	44.00 N
191/0810	13.37	13.92	11.112	32.152	24.573	4.4	243	1.6	00	131	40	44.07 N
191/0825	14.06	15.02	11.053	32.153	24.504	6.7	262	1.6	00	269	40	44.07 N
191/0840	14.72	14.86	11.026	32.127	24.569	6.0	272	1.6	00	267	40	44.07 N
191/0855	13.57	13.58	11.076	32.074	24.518	4.5	315	1.9	126	59	40	43.94 N
191/0910	13.21	13.10	11.080	32.070	24.515	3.7	249	3.1	106	90	40	43.52 N
191/0925	13.12	12.98	11.071	32.111	24.549	4.4	252	2.7	139	162	40	43.27 N
191/0940	13.37	13.24	11.086	32.061	24.507	2.1	272	3.6	252	269	40	42.99 N
191/0955	12.97	12.83	11.069	32.050	24.501	3.3	351	2.9	260	154	40	42.04 N
191/1010	12.27	12.12	11.083	32.020	24.475	3.4	253	2.4	160	71	40	43.46 N
191/1025	12.37	12.22	11.161	31.973	24.425	4.4	275	2.2	75	53	40	43.34 N
191/1040	12.23	12.15	11.244	31.953	24.082	5.1	10	2.2	304	72	40	44.19 N
191/1055	12.31	12.20	11.003	31.305	23.934	4.5	26	2.3	340	106	40	45.27 N
191/1110	12.21	12.20	11.006	31.115	23.705	5.3	00	2.0	342	100	40	46.46 N
191/1125	12.00	12.14	11.104	31.582	24.131	3.7	340	3.0	267	30	40	47.09 N
191/1140	11.80	12.17	11.057	31.934	24.413	3.3	205	2.7	35	40	40	49.08 N
191/1155	12.04	12.48	11.049	31.930	24.412	4.9	207	3.7	191	236	40	49.09 N
191/1210	12.18	12.53	10.916	32.044	24.526	5.2	3	3.4	272	95	40	50.65 N
191/1225	12.40	12.64	10.893	31.919	24.431	5.5	300	2.9	113	124	40	50.68 N
191/1241	14.65	12.85	10.924	31.925	24.431	*****	***	2.3	240	125	40	50.75 N
191/1257	13.25	13.79	10.313	31.694	24.360	*****	***	2.0	166	124	40	50.55 N
191/1312	13.00	13.65	10.914	31.971	24.460	*****	***	1.4	247	264	40	50.09 N
191/1327	13.73	14.15	10.934	31.541	24.130	*****	***	4.0	262	269	40	49.09 N
191/1342	14.22	14.54	11.000	31.147	23.797	*****	***	5.0	264	256	40	49.77 N
191/1357	14.14	14.60	*****	*****	*****	*****	***	4.7	222	219	40	48.40 N

15 MINUTE AVERAGES: DATA

DTG, Z	TA degC	TDP degC	TS degC	SAL ppt	STGT q/cm**3	WS m/sec	WD deg	SHIPS m/sec	USE deg	HDS deg	LAT deg mins	LONG deg mins
191/1412	14.20	14.05	14.05	*****	*****	*****	***	4.7	224	210	40 46.00 N	69 20 91 W
191/1432	14.30	14.43	14.43	*****	*****	5.2	334	1.0	293	207	40 45.94 N	69 30 09 W
191/1447	15.14	15.10	15.10	*****	*****	4.6	326	0	346	138	40 46.33 N	69 30 08 W
191/1502	15.25	14.98	14.98	*****	*****	4.2	336	1.3	72	40	40 46.76 N	69 30 59 W
191/1517	14.67	14.09	14.09	*****	*****	3.9	313	3.1	107	140	40 46.79 N	69 29 11 W
191/1532	15.04	14.50	14.50	*****	*****	4.6	320	2.1	240	235	40 46.29 N	69 29 06 W
191/1547	15.42	14.74	14.74	*****	*****	4.7	326	2.5	235	235	40 45.53 N	69 30 09 W
191/1602	15.37	14.66	14.66	*****	*****	4.5	360	2.5	155	145	40 45.10 N	69 30 50 W
191/1617	15.62	14.04	14.04	*****	*****	4.7	343	2.9	85	94	40 45.01 N	69 28 29 W
191/1632	16.36	15.41	15.41	*****	*****	3.3	335	4.0	230	294	40 46.20 N	69 27 29 W
191/1647	16.73	15.61	15.61	*****	*****	3.4	345	4.7	232	229	40 40.48 N	69 28 35 W
191/1702	16.62	15.51	11.072	*****	*****	3.4	340	3.0	276	255	40 49.96 N	69 29 02 W
191/1717	16.36	15.18	11.031	32.148	24.585	4.0	356	4.1	153	161	40 40.70 N	69 20 07 W
191/1732	16.40	15.02	11.080	32.135	24.563	4.0	352	3.7	200	222	40 47.21 N	69 28.04 W
191/1747	16.50	15.02	11.053	32.123	24.561	3.7	11	4.4	105	94	40 46.60 N	69 27 07 W
191/1802	16.38	14.87	11.167	32.148	24.559	*****	***	4.6	201	245	40 47.54 N	69 25 08 W
191/1817	16.39	14.07	11.091	32.154	24.578	3.0	20	4.5	185	112	40 42.36 N	69 26.90 W
191/1832	16.72	15.31	11.095	32.166	24.580	2.7	14	4.2	179	222	40 51.43 N	69 26.55 W
191/1847	16.33	15.06	11.170	32.154	24.563	3.1	6	4.2	184	190	40 50.54 N	69 26.92 W
191/1902	16.44	14.97	11.052	32.130	24.573	3.6	5	4.4	175	170	40 40.39 N	69 26.92 W
191/1917	16.42	14.78	11.181	32.139	24.550	2.9	317	4.6	94	153	40 47.73 N	69 24.04 W
191/1932	16.48	15.05	11.102	32.154	24.576	2.5	36	4.0	264	192	40 40.94 N	69 24.92 W
191/1947	16.50	15.06	11.107	32.186	24.600	1.9	29	4.5	70	139	40 50.93 N	69 24.50 W
191/2002	16.28	14.85	11.151	32.169	24.579	2.7	34	4.0	234	208	40 51.42 N	69 24.39 W
191/2017	16.46	15.03	11.111	32.154	24.574	2.0	8	4.2	101	190	40 49.12 N	69 25.00 W
191/2032	16.46	14.90	11.003	32.132	24.562	2.7	347	4.6	150	134	40 47.01 N	69 24.28 W
191/2047	16.49	14.94	11.290	32.134	24.525	2.2	294	4.4	90	144	40 47.04 N	69 23.27 W
191/2102	16.67	14.09	11.232	32.144	24.545	2.7	57	3.8	299	255	40 47.84 N	69 23.12 W
191/2117	16.51	14.76	11.246	32.181	24.570	2.6	54	3.9	37	59	40 49.37 N	69 23.41 W
191/2132	16.20	14.65	11.180	32.157	24.564	3.3	94	4.0	266	241	40 50.36 N	69 23.55 W
191/2147	16.43	14.81	11.187	32.151	24.558	2.2	47	5.3	181	104	40 48.14 N	69 24.24 W
191/2202	16.51	14.80	11.121	32.131	24.554	2.4	19	5.0	171	155	40 45.64 N	69 24.08 W
191/2217	16.44	14.84	11.316	32.130	24.518	1.7	105	4.5	04	08	40 45.07 N	69 21.92 W
191/2232	16.36	14.82	11.452	32.130	24.492	2.5	223	3.0	270	302	40 45.71 N	69 21.68 W
191/2247	16.35	14.85	11.203	32.177	24.575	1.6	201	3.8	137	41	40 46.92 N	69 23.36 W
191/2305	*****	*****	11.248	32.128	24.529	*****	***	4.1	278	249	40 40.39 N	69 24.41 W
191/2320	16.56	15.30	11.150	32.154	24.565	*****	***	5.2	173	171	40 46.42 N	69 24.59 W
191/2335	16.74	15.02	11.096	32.140	24.566	*****	***	4.7	174	150	40 44.00 N	69 24.27 W
191/2355	16.62	14.75	11.510	32.141	24.490	2.0	208	4.3	181	114	40 43.06 N	69 21.46 W
192/0010	16.62	14.70	11.461	32.151	24.507	2.1	61	4.1	279	311	40 43.17 N	69 21.03 W
192/0025	16.37	14.75	11.007	32.200	24.629	1.6	97	4.5	319	336	40 44.50 N	69 24.14 W
192/0040	15.96	14.37	11.200	32.157	24.546	1.7	63	4.5	325	313	40 46.33 N	69 25.40 W
192/0055	16.01	14.43	11.247	32.122	24.525	3.3	71	3.9	105	154	40 46.10 N	69 25.90 W
192/0110	16.08	14.69	11.191	32.208	24.602	2.6	8	4.6	171	177	40 43.98 N	69 25.28 W
192/0125	15.79	14.73	11.109	32.143	24.566	2.5	63	4.3	165	147	40 42.14 N	69 25.55 W
192/0140	15.84	14.76	11.350	32.157	24.531	2.0	121	4.2	180	110	40 41.41 N	69 23.26 W
192/0155	16.02	14.62	11.305	32.147	24.533	3.0	70	4.3	262	294	40 41.63 N	69 23.63 W
192/0210	15.69	14.67	11.168	32.149	24.560	3.4	99	4.6	244	106	40 42.64 N	69 26.10 W

15 MINUTE AVERAGES: DATA

DATE, Z	TA degC	TDP degC	TS degC	SAL ppt	SIGT q/cm**3	WS m/sec	WD deg	SHIPS m/sec	ESE deg	HOG deg	LAI deg	100C deg
192/0225	15.38	14.73	11.162	32.207	24.602	2.3	74	4.7	195	254	40.44.54 N	69.26.13 W
192/0240	15.51	14.71	11.312	32.171	24.550	2.7	83	4.1	260	276	40.45.94 N	69.27.13 W
192/0255	15.65	14.66	11.106	32.196	24.593	1.5	203	4.2	150	101	40.44.92 N	69.26.01 W
192/0310	15.79	14.64	11.097	*****	*****	1.7	356	4.2	150	157	40.42.75 N	69.26.09 W
192/0325	16.05	14.56	11.318	*****	*****	1.9	304	4.3	170	135	40.41.00 N	69.24.66 W
192/0340	16.02	14.42	11.253	*****	*****	2.0	60	4.4	290	320	40.41.75 N	69.24.00 W
192/0355	15.65	14.33	11.260	*****	*****	3.2	87	4.0	264	201	40.43.58 N	69.26.69 W
192/0410	15.87	14.63	11.149	*****	*****	2.6	77	5.0	161	215	40.45.73 N	69.26.50 W
192/0425	15.11	14.46	11.218	*****	*****	2.0	123	5.0	326	317	40.47.92 N	69.27.70 W
192/0440	15.21	14.58	11.042	*****	*****	3.1	110	4.2	203	258	40.49.09 N	69.30.10 W
192/0455	14.72	14.12	10.983	*****	*****	2.7	73	4.0	175	192	40.47.86 N	69.30.61 W
192/0510	13.79	13.58	11.007	*****	*****	3.1	94	4.1	303	311	40.47.77 N	69.31.61 W
192/0525	14.03	13.85	11.056	*****	*****	3.3	94	4.1	277	244	40.48.66 N	69.33.91 W
192/0540	14.09	13.99	11.018	*****	*****	6	294	4.2	120	130	40.48.10 N	69.33.16 W
192/0555	14.59	14.48	10.974	*****	*****	2.6	104	4.6	85	79	40.47.59 N	69.30.63 W
192/0610	14.46	14.36	11.135	*****	*****	4.3	113	5.0	59	64	40.48.77 N	69.27.93 W
192/0625	14.12	14.02	11.326	*****	*****	3.6	18	2.5	117	103	40.49.73 N	69.26.03 W
192/0640	14.29	14.22	11.220	*****	*****	3.2	130	3.1	263	234	40.50.13 N	69.27.08 W
192/0655	14.55	14.48	11.247	*****	*****	9	243	4.4	139	145	40.48.97 N	69.26.17 W
192/0710	14.92	14.04	11.245	*****	*****	1.5	295	3.4	147	163	40.47.63 N	69.24.57 W
192/0725	14.95	14.09	11.272	*****	*****	0	317	3.0	175	181	40.45.70 N	69.24.40 W
192/0740	14.03	13.97	11.223	*****	*****	1.3	243	4.2	170	177	40.43.93 N	69.24.07 W
192/0755	13.69	13.64	11.169	*****	*****	1.6	272	3.6	173	173	40.42.87 N	69.23.74 W
192/0810	13.45	13.36	11.078	32.174	24.596	3.0	304	2.7	193	210	40.40.59 N	69.23.40 W
192/0825	13.92	13.82	11.110	32.169	24.586	3.4	354	2.9	172	143	40.40.08 N	69.24.64 W
192/0840	12.33	12.29	11.106	32.171	24.588	2.0	332	2.3	74	94	40.40.50 N	69.23.56 W
192/0855	12.84	11.97	11.057	32.174	24.600	3.1	25	1.4	206	151	40.40.47 N	69.23.43 W
192/0910	13.23	13.05	11.049	32.178	24.604	*****	***	1.0	174	157	40.40.11 N	69.23.41 W
192/0926	12.77	12.71	11.083	32.170	24.592	*****	***	3.0	281	304	40.40.50 N	69.23.81 W
192/0941	12.71	12.73	11.021	32.148	24.586	*****	***	4.3	354	6	40.42.48 N	69.24.53 W
192/0956	12.70	12.62	11.138	32.146	24.563	4.4	50	9	266	72	40.43.31 N	69.24.73 W
192/1011	12.59	12.47	11.150	32.147	24.561	2.5	46	9	192	194	40.42.97 N	69.24.50 W
192/1026	12.72	12.62	11.104	32.144	24.568	3.5	37	1.0	230	205	40.42.60 N	69.25.20 W
192/1041	13.45	13.49	11.206	32.134	24.541	4.6	43	3.9	347	37	40.43.75 N	69.25.70 W
192/1056	13.62	13.59	11.076	32.172	24.595	3.4	69	3.1	347	151	40.45.61 N	69.26.00 W
192/1111	12.40	12.35	11.091	32.169	24.590	3.1	56	2.8	206	327	40.46.13 N	69.26.79 W
192/1126	12.59	12.48	11.095	32.202	24.615	3.3	61	2.1	276	213	40.46.46 N	69.28.00 W
192/1141	13.17	12.95	11.091	32.178	24.597	4.4	70	2.0	260	213	40.46.49 N	69.29.61 W
192/1156	14.20	14.05	11.109	32.171	24.588	3.5	79	1.0	146	54	40.46.57 N	69.29.03 W
192/1211	14.70	14.52	11.122	32.185	24.596	3.3	81	7	120	65	40.46.76 N	69.29.46 W
192/1226	14.61	14.46	*****	*****	*****	2.0	83	1.0	50	65	***	*****
192/1241	14.67	14.39	11.116	32.042	24.486	2.5	75	2.1	61	65	40.47.67 N	69.29.40 W
192/1256	14.81	14.31	11.134	31.973	24.429	3.1	75	2.2	58	65	40.40.22 N	69.26.30 W
192/1311	14.67	13.95	11.117	31.961	24.423	3.2	78	2.4	59	65	40.40.01 N	69.24.99 W
192/1326	14.29	13.30	11.013	32.004	24.476	3.6	70	2.4	60	65	40.49.41 N	69.23.62 W
192/1341	14.26	13.04	10.873	32.161	24.623	4.9	84	2.5	59	65	40.50.83 N	69.22.24 W
192/1356	14.59	13.50	10.768	32.328	24.773	6.0	85	2.0	52	66	40.50.66 N	69.21.00 W
192/1411	14.18	13.02	10.706	32.246	24.720	6.4	89	1.7	54	66	40.51.28 N	69.20.13 W

15 MINUTE AVERAGES: DATA

DIG, Z	TA deg	TBP deg	TS deg	SAL ppt	SYST q/cm**3	WS m/sec	WD deg	SDPS m/sec	USE deg	HDS deg	LAT deg	LONG deg
192/1426	13.89	12.58	10.688	32.234	24.714	5.7	92	1.3	54	66	40 51.62 N	69 19 35 W
192/1441	13.87	12.37	10.667	32.160	24.666	5.2	91	7	54	65	40 51.87 N	69 19 36 W
192/1558	13.85	12.59	10.137	32.200	24.666	5.0	92	0	192	179	40 51.42 N	69 19 37 W
192/1613	13.95	12.65	10.907	32.190	24.646	5.6	101	7	193	100	40 51.06 N	69 19 40 W
192/1628	14.09	12.67	10.907	32.359	24.770	5.6	103	5	197	180	40 50.77 N	69 19 54 W
192/1643	14.03	12.71	11.037	32.291	24.694	5.0	110	5	186	180	40 50.52 N	69 19 50 W
192/1658	14.02	12.76	10.967	32.204	24.702	4.9	122	5	201	202	40 50.32 N	69 19 61 W
192/1726	14.34	13.13	11.327	32.182	24.556	4.7	133	5	240	220	40 50.27 N	69 19 43 W
192/1741	14.39	13.13	11.027	32.268	24.678	4.6	133	4	191	224	40 50.09 N	69 19 54 W
192/1756	15.01	13.41	10.997	32.263	24.680	4.6	132	5	242	250	40 49.97 N	69 19 65 W
192/1811	15.04	13.94	11.097	32.140	24.572	2.6	106	1.3	152	130	40 49.94 N	69 19 61 W
192/1826	14.90	13.70	11.077	32.218	24.630	2.4	113	2	132	223	40 50.13 N	69 19 52 W
192/1841	15.22	13.92	10.977	32.183	24.621	2.4	114	3	108	245	40 50.01 N	69 19 52 W
192/1856	15.18	13.46	10.967	32.230	24.660	2.4	117	2	269	266	40 49.96 N	69 19 03 W
192/1911	14.51	12.94	10.997	32.104	24.618	1.6	104	5	267	267	40 49.95 N	69 19 20 W
192/1926	14.50	13.05	11.007	32.158	24.509	1.7	93	1.3	263	254	40 49.92 N	69 19 15 W
192/1941	14.65	13.94	11.027	32.158	24.593	1.2	47	1.5	97	128	40 49.83 N	69 19 57 W
192/1956	14.41	13.13	11.037	32.198	24.622	1.5	92	4	134	255	40 49.87 N	69 19 07 W
192/2011	14.91	13.77	11.317	32.146	24.530	1.0	57	7	132	190	40 49.66 N	69 19 00 W
192/2026	14.98	13.78	11.417	32.140	24.507	2.7	67	7	131	206	40 49.43 N	69 19 43 W
192/2041	15.05	13.26	11.217	32.228	24.612	3.0	60	7	132	248	40 49.19 N	69 19 01 W
192/2056	14.79	13.47	11.057	32.278	24.681	1.9	65	0	132	275	40 49.92 N	69 17 60 W
192/2111	14.72	13.95	11.137	32.250	24.644	1.0	61	9	128	110	40 48.66 N	69 17 30 W
192/2126	14.98	14.34	11.157	32.228	24.623	2.4	75	7	152	55	40 48.37 N	69 16 22 W
192/2141	15.07	14.51	11.237	32.203	24.509	1.5	60	1.3	123	100	40 48.05 N	69 16 42 W
192/2156	14.99	14.79	11.427	32.358	24.674	1.7	75	1.4	120	100	40 47.66 N	69 15 40 W
192/2211	14.85	14.90	11.507	32.590	24.839	1.0	84	1.3	120	101	40 47.34 N	69 14 05 W
192/2226	14.99	15.07	11.417	32.651	24.904	2.1	05	1.3	127	101	40 46.97 N	69 14 15 W
192/2241	15.53	15.63	11.977	32.651	24.904	3.1	90	1.1	129	112	40 46.59 N	69 13 52 W
192/2256	15.47	15.53	11.557	32.651	24.904	3.0	117	3.1	283	315	40 47.02 N	69 14 25 W
192/2311	14.88	14.87	11.047	32.028	24.488	3.0	116	3.9	300	318	40 47.95 N	69 16 37 W
192/2326	14.39	14.30	11.117	31.948	24.413	5.6	125	3.0	257	198	40 49.21 N	69 17 02 W
192/2341	14.78	14.65	11.187	31.837	24.314	4.0	110	9	181	172	40 49.09 N	69 17 02 W
192/2356	14.49	14.36	11.197	31.906	24.366	5.3	102	2.3	130	106	40 48.68 N	69 17 36 W
193/0011	14.40	14.25	11.167	32.651	24.366	5.3	102	2.3	130	106	40 48.68 N	69 17 36 W
193/0026	14.17	14.01	11.337	32.651	24.366	5.0	109	3.0	61	55	40 49.24 N	69 15 37 W
193/0041	14.09	13.96	11.327	32.651	24.366	3.4	119	2.3	103	64	40 49.81 N	69 13 49 W
193/0056	14.30	14.11	11.607	32.651	24.366	4.7	104	2.5	124	68	40 49.66 N	69 12 71 W
193/0111	14.28	14.04	13.207	32.651	24.366	4.0	114	4.9	85	02	40 50.01 N	69 9 53 W
193/0126	14.34	14.10	14.057	32.651	24.366	1.5	50	3.0	113	104	40 49.84 N	69 7 20 W
193/0141	14.32	13.91	14.287	32.651	24.366	5.3	99	3.0	105	05	40 49.02 N	69 6 13 W
193/0156	13.86	13.63	14.827	32.651	24.366	3.7	05	4.5	92	99	40 49.95 N	69 3 26 W
193/0211	13.35	13.21	13.007	32.651	24.366	4.0	09	6	150	140	40 49.76 N	69 2 17 W
193/0226	12.89	12.75	11.657	32.651	24.366	6.0	96	4.9	5	10	40 51.10 N	69 2 02 W
193/0241	12.70	12.55	11.477	32.651	24.366	6.0	109	5.0	12	15	40 53.40 N	69 1 09 W
193/0256	12.93	12.61	12.407	32.651	24.366	6.0	110	1.6	132	100	40 54.90 N	69 1 16 W
193/0311	13.70	13.61	12.957	32.651	24.366	5.4	113	4.9	272	270	40 55.02 N	69 3 10 W
193/0326	14.00	13.93	13.037	32.651	24.366	5.2	123	1.6	269	272	40 54.97 N	69 6 52 W
									200	265	40 55.03 N	69 8 27 W

15 MINUTE AVERAGES: Data

DIG, Z	LA degC	TD degC	TS degC	SAL ppt	STGT q/cm**3	MS m/sec	WD deg	SHIPS m/sec	CSF deg	100C deg	101 deg mins	100E deg mins
193/0341	14.09	14.46	11.007	32.243	24.673	4.0	103	5.4	260	291	40 54 21 N	69 10 22 W
193/0356	13.70	13.78	10.947	32.243	24.673	4.7	102	3.3	203	300	40 55 00 N	69 13 57 W
193/0411	13.76	13.70	10.947	32.270	24.701	5.4	110	3.1	230	113	40 56 33 N	69 14 40 W
193/0426	14.14	14.17	10.917	32.223	24.663	5.0	127	1.6	172	190	40 58 34 N	69 13 21 W
193/0441	14.27	14.29	10.937	32.200	24.640	5.3	126	1.0	251	214	40 58 12 N	69 14 50 W
193/0456	14.69	14.72	10.947	32.106	24.631	4.6	121	7	176	157	40 54 05 N	69 14 29 W
193/0511	14.64	14.60	10.947	32.203	24.642	5.0	121	0	199	172	40 54 54 N	69 14 06 W
193/0526	14.66	14.60	10.977	32.243	24.653	3.0	123	0	211	190	40 54 21 N	69 15 11 W
193/0541	14.61	14.66	10.907	32.233	24.653	5.1	123	0	213	102	40 53 00 N	69 15 47 W
193/0556	14.61	14.61	10.927	32.250	24.669	5.0	121	7	209	190	40 53 53 N	69 15 46 W
193/0611	14.91	14.93	10.937	32.168	24.617	6.1	120	7	200	107	40 53 22 N	69 16 11 W
193/0626	14.93	14.96	10.927	32.150	24.617	5.2	137	7	206	107	40 52 22 N	69 16 11 W
193/0641	14.71	14.75	10.097	32.131	24.596	4.4	130	0	227	214	40 52 61 N	69 16 40 W
193/0656	14.75	14.77	10.907	32.090	24.560	0.7	133	1.0	235	224	40 50 23 N	69 16 20 W
193/0711	15.44	15.50	10.917	32.008	24.550	5.1	127	1.1	206	190	40 53 23 N	69 17 37 W
193/0726	15.58	15.69	10.967	32.106	24.560	5.5	131	1.2	167	191	40 51 37 N	69 17 16 W
193/0741	15.73	16.04	11.067	32.162	24.509	5.4	130	1.2	200	209	40 50 02 N	69 17 06 W
193/0756	15.29	15.52	11.117	32.154	24.573	5.1	126	1.1	227	230	40 50 41 N	69 10 14 W
193/0811	14.90	15.20	10.987	32.023	24.534	5.0	122	1.1	213	229	40 50 00 N	69 18 57 W
193/0826	14.86	15.20	11.017	32.020	24.494	5.0	124	1.2	214	240	40 49 50 N	69 18 56 W
193/0841	15.02	15.37	11.007	32.065	24.524	5.1	125	1.1	243	270	40 49 10 N	69 19 54 W
193/0856	14.69	15.02	11.047	32.115	24.566	6.0	124	1.1	249	249	40 40 28 N	69 20 22 W
193/0911	14.65	15.05	11.127	32.115	24.566	6.6	124	6	117	61	40 40 84 N	69 20 23 W
193/0926	15.13	15.39	11.107	32.115	24.566	6.6	122	7	106	61	40 40 75 N	69 19 26 W
193/0941	14.90	15.16	11.187	32.115	24.566	6.0	136	6	111	61	40 40 65 N	69 19 30 W
193/0956	15.10	15.34	11.147	32.115	24.566	7.2	132	7	110	60	40 40 54 N	69 18 59 W
193/1011	15.42	15.57	11.177	32.115	24.566	6.7	137	6	116	53	40 40 40 N	69 18 59 W
193/1026	14.42	14.84	11.007	32.010	24.473	6.5	130	4	111	33	40 40 31 N	69 18 50 W
193/1041	14.05	14.43	11.037	32.027	24.493	6.6	129	2	193	41	40 40 28 N	69 18 21 W
193/1056	14.00	14.42	11.007	32.029	24.496	7.3	127	3	229	1	40 40 31 N	69 18 42 W
193/1111	14.29	14.62	10.897	32.071	24.549	7.3	127	5	222	3	40 40 32 N	69 18 73 W
193/1126	14.55	14.66	10.947	32.053	24.526	7.3	126	7	274	1	40 40 34 N	69 19 16 W
193/1141	14.32	14.39	11.067	32.000	24.463	6.7	124	7	277	22	40 40 37 N	69 19 32 W
193/1156	14.05	14.11	11.007	32.046	24.509	7.0	123	9	203	15	40 40 46 N	69 20 17 W
193/1211	13.56	13.66	10.967	32.091	24.552	***	***	***	292	50	40 40 62 N	69 20 03 W
193/1226	14.30	14.45	10.947	32.070	24.539	***	***	***	263	51	40 40 50 N	69 21 06 W
193/1241	14.70	14.90	10.927	32.047	24.525	7.1	126	1.0	173	91	40 40 88 N	69 20 60 W
193/1256	15.04	15.33	10.937	32.040	24.517	0.4	131	1.2	122	91	40 40 59 N	69 20 05 W
193/1311	15.28	15.64	10.917	32.002	24.554	8.0	133	1.0	140	91	40 40 25 N	69 19 52 W
193/1326	15.07	15.33	10.927	32.050	24.527	0.1	129	0	205	42	40 42 94 N	69 19 29 W
193/1341	14.90	15.79	10.907	32.103	24.627	7.4	129	1.1	300	10	40 40 18 N	69 19 24 W
193/1356	14.70	15.99	10.927	32.103	24.627	7.7	132	1.3	310	24	40 40 61 N	69 20 14 W
193/1411	15.01	15.77	10.897	32.224	24.660	7.7	127	1.3	299	41	40 42 10 N	69 20 50 W
193/1426	15.23	15.70	10.907	32.250	24.606	7.0	129	1.4	17	43	40 49 02 N	69 20 32 W
193/1441	15.55	15.96	10.877	32.246	24.609	7.6	132	2.4	143	162	40 50 33 N	69 19 93 W
193/1456	16.46	16.51	10.087	32.250	24.690	4.5	132	1.6	193	162	40 49 66 N	69 20 07 W
193/1511	16.55	16.55	10.907	32.296	24.722	4.6	137	0	199	151	40 49 23 N	69 20 65 W
193/1532	15.95	15.83	11.297	32.438	24.761	7.0	143	5	333	150	40 50 35 N	69 19 55 W

15 MINUTE AVERAGES DATA

DIG, Z	TA	TDP	TS	SAT	STCT	WS	WD	SHPS	CSE	HDC	LAT	LONG
	degC	degC	degC	ppt	g/cm ³	m/sec	deg	m/sec	deg	deg	deg	mins
193/1647	18.00	15.80	11.257	32.350	24.786	7.0	155	7	370	221	40 50 60 N	69 17 60 W
193/1732	10.58	15.52	11.157	32.403	24.759	5.5	173	6	103	142	40 49 98 N	69 10 17 W
193/1747	10.52	15.35	11.157	32.403	24.759	5.5	173	6	103	142	40 49 98 N	69 10 17 W
193/1822	10.96	15.51	11.467	32.563	24.826	4.7	190	4	69	143	40 50 03 N	69 17 90 W
193/1851	10.94	15.30	11.407	32.595	24.847	4.2	201	9	24	163	40 51 53 N	69 17 23 W
193/1951	19.20	15.91	11.597	32.298	24.541	4.9	207	5	135	228	40 52 40 N	69 16 29 W
193/2041	19.65	16.93	11.227	32.298	24.659	5.0	203	1.1	161	217	40 50 63 N	69 17 25 W
193/2107	19.70	16.00	11.477	32.300	24.602	4.8	195	1.7	199	219	40 48 33 N	69 18 09 W
193/2143	18.96	16.99	11.147	32.466	24.810	5.4	206	2.7	133	126	40 47 03 N	69 17 22 W
193/2150	18.07	17.25	11.300	32.573	24.840	6.0	193	5.1	123	128	40 45 03 N	69 15 40 W
193/2213	18.79	17.43	12.450	32.775	24.802	4.4	310	2.4	130	134	40 44 69 N	69 13 52 W
193/2220	18.63	17.44	13.140	32.807	24.689	5.3	125	2.5	113	84	40 44 51 N	69 12 64 W
193/2243	18.53	17.53	14.259	32.842	24.405	5.4	208	5.5	88	85	40 44 50 N	69 9 40 W
193/2258	18.54	17.60	14.002	33.024	24.663	5.9	200	4.6	87	82	40 44 60 W	69 6 12 W
193/2313	18.63	17.87	14.429	33.088	24.639	5.6	17	2.2	105	86	40 44 64 W	69 4 56 W
193/2338	18.75	18.07	14.560	33.141	24.651	5.9	173	5.2	84	88	40 44 03 N	69 1 62 W
193/2343	18.92	18.31	15.400	33.087	24.427	6.2	348	3.9	95	90	40 41 93 N	60 10 67 W
193/2358	19.20	18.60	15.290	33.079	24.443	3.0	251	3.0	163	167	40 44 21 N	60 57 95 W
194/0013	19.49	19.85	16.243	33.856	24.214	3.5	232	5.6	194	204	40 41 73 N	60 10 69 W
194/0035	19.54	19.22	17.447	33.192	24.037	5.9	295	2.6	229	254	40 39 96 N	69 10 10 W
194/0050	19.61	19.39	15.977	33.089	24.299	5.8	193	5.1	278	278	40 39 03 N	69 3 20 W
194/0105	18.99	18.82	14.345	33.095	24.662	5.9	293	3.7	266	232	40 39 05 N	69 6 15 W
194/0120	19.15	19.01	14.658	33.077	24.581	6.8	225	2.9	166	145	40 39 22 N	69 6 55 W
194/0135	19.51	19.37	16.746	33.082	24.117	5.2	193	5.5	102	103	40 36 68 W	69 6 62 W
194/0150	19.38	19.26	17.643	33.256	24.039	5.2	211	3.7	200	265	40 35 12 N	69 6 05 W
194/0205	19.17	19.09	16.604	33.132	24.124	5.7	201	5.0	267	275	40 34 96 N	69 9 02 W
194/0220	19.21	19.15	15.866	32.998	24.254	5.8	244	5.3	271	276	40 34 96 N	69 12 50 W
194/0252	18.32	18.29	14.700	33.823	24.511	6.0	198	4.7	95	13	40 37 21 N	69 14 38 W
194/0323	17.72	17.72	11.609	32.609	24.835	7.8	226	2.5	237	222	40 39 56 N	69 14 59 W
194/0338	17.38	17.43	11.320	32.534	24.831	6.9	224	5.3	270	204	40 39 01 N	69 17 71 W
194/0353	16.75	16.84	11.254	32.373	24.718	6.1	226	2.0	200	313	40 40 07 N	69 19 98 W
194/0416	16.61	16.79	11.096	32.242	24.646	7.3	242	3.4	292	295	40 40 76 N	69 21 09 W
194/0431	16.72	16.83	11.095	32.235	24.640	6.8	245	1.7	202	198	40 40 49 N	69 22 62 W
194/0446	17.13	17.24	11.195	32.269	24.648	3.9	243	2.7	242	247	40 39 03 N	69 23 71 W
194/0501	17.93	18.02	11.182	32.359	24.721	5.7	240	2.8	292	309	40 39 93 N	69 25 34 W
194/0516	18.31	18.39	11.203	32.345	24.706	5.2	245	2.3	331	342	40 40 06 N	69 26 54 W
194/0531	18.11	18.19	11.174	32.311	24.684	5.8	245	2.2	342	345	40 41 09 N	69 26 00 W
194/0546	17.30	17.32	11.169	32.295	24.673	6.1	212	2.3	340	345	40 42 98 N	69 27 11 W
194/0601	15.91	15.93	11.169	32.289	24.669	6.3	221	2.1	351	344	40 44 06 N	69 27 37 W
194/0616	16.65	16.65	11.106	32.257	24.640	8.1	239	1.7	346	330	40 44 93 N	69 27 59 W
194/0631	17.34	17.30	11.281	32.254	24.635	8.6	244	1.6	344	339	40 45 70 N	69 27 90 W
194/0647	17.43	17.38	11.220	32.254	24.632	8.1	242	1.6	345	326	40 46 49 N	69 28 12 W
194/0702	18.19	18.11	11.227	32.217	24.620	7.5	244	1.5	346	319	40 47 18 N	69 28 44 W
194/0717	18.59	18.49	11.250	32.217	24.598	6.5	237	1.3	340	290	40 47 00 N	69 29 28 W
194/0732	18.24	18.14	11.253	32.186	24.573	5.0	240	9	310	282	40 48 18 N	69 29 24 W
194/0747	17.72	17.64	11.249	32.163	24.556	5.9	227	9	301	280	40 48 44 N	69 29 24 W
194/0802	17.65	17.57	11.228	32.134	24.537	6.2	240	9	300	208	40 48 67 N	69 30 24 W
194/0817	17.81	17.72	11.224	32.125	24.531	6.7	237	8	296	279	40 48 05 N	69 30 23 W

15 MINUTE AVERAGES DATA

DEC, Z	TA degC	TDP degC	TS degC	SAL ppt	SICT g/cm ³	WS m/sec	WD deg	SDIPS m/sec	ESF deg	HDS deg	LAT deg mins	LONG deg mins
194/0032	17.92	17.81	11.250	32.117	24.520	6.5	247	7	297	279	40 49 01 N	69 31 10 W
194/0047	17.66	17.55	11.267	32.099	24.499	5.5	246	7	284	279	40 49 12 N	69 31 05 W
194/0902	17.40	17.37	11.330	31.750	24.219	5.1	245	0	270	200	40 49 20 N	69 32 16 W
194/0917	17.46	17.36	11.349	31.212	23.790	4.4	240	9	273	279	40 49 24 N	69 32 21 W
194/0932	17.63	17.52	11.516	31.150	23.719	4.5	240	6	274	203	40 49 26 N	69 33 20 W
194/0947	10.00	17.07	11.390	31.151	23.794	5.2	242	6	203	303	40 49 30 N	69 33 27 W
194/1002	17.61	17.49	11.361	31.200	23.793	6.0	244	7	270	301	40 49 36 N	69 31 07 W
194/1017	17.72	17.59	11.382	31.244	23.817	6.3	249	7	273	306	40 49 39 N	69 31 03 W
194/1032	17.60	17.47	11.307	31.272	23.830	5.6	240	6	313	163	40 49 40 N	69 34 06 W
194/1047	17.43	17.31	11.412	31.277	23.837	6.3	246	6	307	51	40 49 40 N	69 34 06 W
194/1102	17.57	17.44	11.459	31.234	23.795	6.0	249	4	279	266	40 49 45 N	69 35 03 W
194/1117	17.11	16.99	11.482	31.229	23.787	6.6	259	4	200	327	40 49 40 N	69 35 12 W
194/1132	17.21	17.10	11.503	31.106	23.688	6.7	265	4	200	333	40 49 41 N	69 35 27 W
194/1147	17.41	17.29	11.499	31.059	23.652	5.8	272	5	186	170	40 49 46 N	69 35 31 W
194/1202	17.60	17.46	11.503	31.157	23.727	6.0	269	6	169	213	40 49 50 N	69 35 20 W
194/1217	17.10	17.04	11.500	31.363	23.902	6.3	273	5	222	337	40 49 43 N	69 35 24 W
194/1232	17.14	16.99	11.429	32.010	24.403	5.6	267	5	230	328	40 49 26 N	69 35 20 W
194/1247	16.97	16.82	11.420	32.009	24.405	4.9	265	6	247	200	40 49 18 N	69 35 25 W
194/1302	16.48	16.35	11.471	32.010	24.396	4.0	258	6	29	45	40 49 39 N	69 35 26 W
194/1317	16.82	16.60	11.529	31.993	24.372	2.9	247	1.0	30	45	40 49 26 N	69 35 69 W
194/1332	16.07	15.93	11.561	31.960	24.346	3.2	233	1.0	54	69	40 50 20 N	69 35 22 W
194/1347	16.01	15.90	11.553	31.973	24.351	4.0	266	9	175	184	40 50 09 N	69 35 11 W
194/1402	16.77	16.63	11.552	31.979	24.356	2.9	263	1.7	250	249	40 49 79 N	69 35 29 W
194/1417	16.74	16.61	11.550	31.976	24.355	2.7	269	1.7	251	240	40 49 51 N	69 36 20 W
194/1432	16.05	15.95	11.539	31.977	24.357	3.5	245	1.7	254	250	40 49 27 N	69 38 01 W
194/1447	16.32	16.21	11.480	31.980	24.371	4.7	240	1.5	256	249	40 49 07 N	69 39 01 W
194/1502	16.65	16.53	11.476	31.980	24.372	2.5	266	1.5	255	250	40 40 91 N	69 39 29 W
194/1517	16.65	16.53	11.472	31.979	24.371	1.7	275	1.5	261	250	40 40 77 N	69 40 20 W
194/1532	16.77	16.64	11.474	31.979	24.371	1.0	67	1.4	262	250	40 40 66 N	69 41 04 W
194/1547	17.17	17.02	11.492	31.971	24.362	2.2	256	1.3	264	249	40 48 57 N	69 42 27 W
194/1602	17.44	17.29	11.514	31.841	24.257	1.9	314	1.3	265	240	40 48 52 N	69 43 56 W
194/1617	17.38	17.23	11.505	31.695	24.145	2.2	291	2.2	112	189	40 48 63 N	69 43 40 W
194/1632	17.40	17.31	11.482	31.033	23.634	2.6	253	3.0	75	86	40 49 03 N	69 41 01 W
194/1647	17.45	17.23	11.435	31.556	24.050	2.6	257	3.0	00	55	40 49 35 N	69 39 69 W
194/1702	18.10	17.81	11.408	32.065	24.450	2.7	261	3.1	83	95	40 49 55 N	69 37 21 W
194/1717	10.00	17.67	11.377	32.134	24.509	2.3	240	2.6	73	92	40 49 34 N	69 38 36 W
194/1732	17.71	17.04	11.376	32.157	24.520	1.6	240	1.1	48	122	40 50 10 N	69 38 05 W
194/1747	17.50	16.58	11.407	32.159	24.523	1.2	304	9	19	110	40 50 59 N	69 34 27 W
194/1802	17.30	16.31	11.390	32.161	24.520	1.9	295	8	129	190	40 50 70 N	69 34 52 W
194/1817	17.48	16.29	11.356	32.165	24.538	1.3	280	4.3	190	201	40 50 14 N	69 34 61 W
194/1832	17.57	16.32	11.308	32.147	24.533	1.8	268	1.9	190	199	40 49 36 W	69 34 20 W
194/1847	17.62	16.31	11.257	32.118	24.519	1.8	267	1.7	96	189	40 40 09 N	69 34 20 W
194/1902	17.72	16.32	11.291	32.117	24.512	1.8	274	1.7	54	179	40 49 00 N	69 34 47 W
194/1917	17.82	16.04	11.319	32.118	24.508	1.9	221	1.0	53	164	40 49 32 W	69 33 59 W
194/1932	17.81	15.59	11.315	32.119	24.509	1.9	222	1.0	57	157	40 49 55 W	69 33 55 W
194/1947	10.50	15.85	11.309	32.122	24.513	1.0	227	1.9	42	150	40 49 03 N	69 33 16 W
194/2002	19.00	15.76	11.305	32.126	24.516	1.3	236	1.2	115	222	40 49 22 N	69 32 20 W
194/2017	18.48	14.08	11.276	32.120	24.517	1.8	200	3.2	217	226	40 40 21 W	69 33 25 W

15 MINUTE AVERAGED DATA

DATE, Z	TA	TOP	TS	SAL	SIGT	WS	WB	SHIPS	CSF	HOG	LAI	LOBS
	degC	degC	degC	ppt	g/cm ³	m/sec	deg	m/sec	deg	deg	deg	deg
194/2032	18.81	15.20	11.872	32.150	24.428	7	295	4.3	225	230	40 42 50 N	69 35 59 W
194/2047	19.54	15.81	14.115	32.101	23.943	6	317	4.4	224	229	40 45 59 N	69 37 57 W
194/2102	19.73	15.83	14.060	32.065	23.757	5	347	4.5	224	230	40 44 43 N	69 39 56 W
194/2117	19.91	15.90	14.829	32.061	23.761	3.2	283	4.5	97	61	40 44 47 N	69 39 51 W
194/2132	20.08	15.92	14.413	32.060	23.048	3.6	215	4.4	30	35	40 46 27 N	69 30.05 W
194/2147	20.30	15.90	12.820	32.119	24.219	4.0	217	4.2	37	34	40 47 22 N	69 36 57 W
194/2202	20.10	15.53	11.719	32.140	24.450	4.2	222	3.5	143	194	40 49 44 N	69 35 21 W
194/2217	19.47	15.16	11.872	32.125	24.409	3.5	211	3.6	192	293	40 50 05 N	69 35 03 W
194/2232	19.45	15.43	11.773	32.122	24.426	4.8	230	3.6	140	243	40 49 77 N	69 35 45 W
194/2247	19.52	15.66	12.622	32.137	24.274	4.5	234	5.2	103	193	40 47 62 N	69 35 13 W
194/2302	19.47	15.70	14.362	32.067	23.865	3.9	240	3.4	103	194	40 45 44 N	69 35 07 W
194/2317	19.27	15.54	15.099	32.056	23.699	4.0	222	4.1	179	190	40 43 92 N	69 35 05 W
194/2332	10.66	15.32	14.378	32.082	23.073	3.7	228	5.2	103	106	40 41.39 N	69 36 05 W
194/2347	10.19	15.26	12.553	32.142	24.291	4.1	231	2.6	101	104	40 39 78 N	69 36 09 W
195/0002	17.86	15.31	11.739	32.228	24.515	5.1	233	5.4	100	100	40 37 49 N	69 36 17 W
195/0017	17.67	15.60	11.520	32.288	24.602	4.1	253	3.1	190	298	40 35 35 N	69 36 15 W
195/0032	17.80	15.73	11.274	32.309	24.664	4.0	273	3.1	158	140	40 34 69 N	69 35 55 W
195/0047	17.53	15.61	11.365	32.396	24.715	4.4	233	4.0	110	106	40 33 03 N	69 32 79 W
195/0102	17.57	15.85	12.109	32.589	24.708	4.2	234	4.9	116	113	40 32 90 N	69 29 93 W
195/0117	17.42	15.84	13.725	32.890	24.640	5.0	247	3.0	145	147	40 32 12 N	69 27 49 W
195/0132	17.36	15.80	14.318	33.059	24.640	3.6	249	3.3	92	73	40 32 28 N	69 26 17 W
195/0147	17.18	15.78	15.393	33.019	24.376	4.3	297	4.6	64	62	40 33 20 N	69 23 50 W
195/0202	17.82	15.69	13.736	32.946	24.675	4.4	246	4.5	57	63	40 34 37 N	69 21 01 W
195/0217	16.65	15.39	12.405	32.717	24.765	4.0	259	1.5	175	104	40 34 59 N	69 20 10 W
195/0232	16.41	15.24	14.062	32.914	24.582	1.2	303	5.2	265	272	40 34 15 N	69 22 62 W
195/0248	15.80	14.78	12.279	32.692	24.771	2.8	290	4.4	209	203	40 34 61 N	69 25 65 W
195/0303	15.57	14.75	11.874	32.476	24.601	3.6	270	2.2	316	75	40 35 25 N	69 26 00 W
195/0318	15.28	14.58	11.739	32.358	24.615	2.9	253	4.5	75	10	40 37 25 N	69 26 14 W
195/0333	15.32	14.70	11.568	32.337	24.632	3.5	240	3.3	58	58	40 39 24 N	69 26 73 W
195/0348	15.00	14.39	11.512	32.287	24.603	3.0	251	3.3	249	123	40 39 53 N	69 26 10 W
195/0403	14.95	14.36	11.485	32.287	24.608	3.2	254	3.3	269	121	40 39 51 N	69 27 66 W
195/0418	15.12	14.56	11.367	32.303	24.643	3.3	263	4.4	228	105	40 39 52 N	69 27 19 W
195/0433	15.15	14.63	11.237	32.350	24.703	3.6	269	1.3	116	73	40 39 82 N	69 26 70 W
195/0448	14.83	14.32	11.191	32.308	24.741	3.2	267	2.4	213	15	40 40 74 N	69 26 13 W
195/0503	14.41	13.91	11.175	32.405	24.758	3.5	257	2.7	16	25	40 42 00 N	69 26 43 W
195/0518	13.46	12.95	11.207	32.375	24.728	4.1	251	2.3	99	73	40 43 01 N	69 25 69 W
195/0533	12.91	12.39	11.224	32.268	24.642	4.5	261	2.0	00	90	40 43 29 N	69 24 42 W
195/0548	12.27	11.73	11.231	32.257	24.632	3.0	259	2.1	93	96	40 43 27 N	69 23 07 W
195/0603	12.65	12.12	11.277	32.359	24.703	3.4	251	2.2	91	95	40 43 24 N	69 21 65 W
195/0618	12.67	12.14	11.374	32.468	24.769	3.5	250	2.2	65	95	40 43 31 N	69 20 21 W
195/0633	12.72	12.19	12.408	31.914	24.142	4.3	264	2.3	90	99	40 43 35 N	69 18 25 W
195/0648	13.27	12.79	13.453	32.022	24.038	4.0	263	2.4	84	74	40 43 43 N	69 17 21 W
195/0703	13.90	13.45	13.858	31.055	23.006	5.0	275	2.4	82	74	40 43 56 N	69 15 72 W
195/0718	14.07	13.64	13.633	31.754	23.775	5.2	269	3.1	335	95	40 44 70 N	69 15 49 W
195/0733	13.84	13.40	12.942	32.174	24.239	5.8	263	3.1	397	251	40 46 20 N	69 15 77 W
195/0748	13.97	13.53	12.167	32.748	24.836	5.5	261	2.4	335	334	40 47 40 N	69 16 45 W
195/0803	13.85	13.41	11.948	32.769	24.895	6.3	268	2.0	330	334	40 48 30 N	69 17 01 W
195/0818	14.44	14.01	11.727	32.782	24.947	5.9	274	1.7	343	334	40 49 18 N	69 17 37 W

15 MINUTE AVERAGED DATA

DIG. Z	TA	TDP	TS	SAL	STCT	WS	WD	SHIPS	PSE	HDS	LAT	LONG
	degC	degC	degC	ppt	g/cm ³	m/sec	deg	m/sec	deg	deg	deg	mins
195/0033	14.24	13.77	*****	*****	*****	4.7	270	1.6	346	334	40 42.96 N	69 17.69 W
195/0048	13.04	13.33	*****	*****	*****	4.7	274	1.0	300	276	40 50.97 N	69 17.59 W
195/0903	14.03	13.47	*****	*****	*****	5.7	295	7	203	270	40 50.58 N	69 18.45 W
195/0910	14.16	13.60	*****	*****	*****	4.0	303	4	227	249	40 50.60 N	69 18.10 W
195/0933	14.35	13.70	*****	*****	*****	5.1	317	5	137	234	40 50.54 N	69 18.63 W
195/0948	14.31	13.72	*****	*****	*****	5.0	326	5	230	270	40 50.37 N	69 18.77 W
195/1003	14.31	13.70	*****	*****	*****	4.0	337	6	231	270	40 50.18 N	69 19.03 W
195/1018	13.99	13.37	*****	*****	*****	5.4	340	6	240	267	40 49.99 N	69 19.31 W
195/1033	14.27	13.64	*****	*****	*****	5.6	3	4	90	354	40 50.02 N	69 19.51 W
195/1048	14.02	13.37	*****	*****	*****	5.9	11	5	152	294	40 50.00 N	69 19.53 W
195/1103	14.21	13.56	*****	*****	*****	6.0	28	6	160	160	40 49.01 N	69 19.59 W
195/1118	14.23	13.57	*****	*****	*****	6.6	29	9	164	120	40 49.40 N	69 19.95 W
195/1134	14.01	13.35	*****	*****	*****	5.7	36	6	73	36	40 49.39 N	69 19.14 W
195/1149	13.75	13.06	*****	*****	*****	6.2	41	4	55	36	40 49.41 N	69 18.84 W
195/1204	14.23	13.46	*****	*****	*****	7.9	56	4	122	36	40 49.33 N	69 18.59 W
195/1219	14.78	13.03	*****	*****	*****	6.9	61	4	133	36	40 49.20 N	69 18.59 W
195/1305	15.12	13.42	*****	*****	*****	6.2	73	1.2	33	93	40 49.32 N	69 17.65 W
195/1320	14.97	13.01	*****	*****	*****	6.1	70	1.3	318	229	40 49.05 N	69 20.20 W
195/1335	15.37	12.35	11.172	32.135	24.549	4.6	70	1.5	231	54	40 50.01 N	69 20.44 W
195/1350	15.17	11.36	11.169	32.210	24.613	3.0	61	1.3	121	67	40 49.70 N	69 19.53 W
195/1405	15.13	10.04	11.181	32.143	24.553	3.4	60	1.7	144	124	40 49.36 N	69 19.04 W
195/1420	15.31	10.65	11.232	32.150	24.549	5.3	70	1.4	210	166	40 40.77 N	69 19.79 W
195/1435	15.50	10.70	11.217	32.172	24.568	4.9	74	1.5	216	163	40 40.12 N	69 19.03 W
195/1450	15.70	10.81	11.222	32.173	24.724	4.3	74	1.3	234	92	40 47.68 N	69 20.94 W
195/1505	15.02	10.03	11.300	32.267	24.620	4.5	75	1.0	250	107	40 47.40 N	69 21.01 W
195/1520	15.63	10.67	11.244	32.304	24.728	4.5	71	1	262	90	40 47.93 N	69 21.63 W
195/1535	*****	*****	10.804	32.412	24.031	4.3	73	7	224	216	40 47.42 N	69 22.17 W
195/1550	15.43	10.57	11.211	32.397	24.745	4.4	69	9	324	22	40 47.63 N	69 22.93 W
195/1605	15.53	10.64	11.202	32.359	24.717	3.9	72	1.1	290	21	40 40.23 N	69 22.49 W
195/1620	15.79	10.04	11.216	32.330	24.690	3.4	62	1.5	283	203	40 40.44 N	69 22.78 W
195/1635	15.77	10.66	11.206	32.332	24.680	4.0	58	2.4	216	216	40 47.53 N	69 23.63 W
195/1650	15.64	10.50	11.290	32.342	24.687	4.3	52	0	276	275	40 47.22 N	69 24.26 W
195/1705	14.96	10.15	11.246	32.302	24.665	4.7	40	2.8	223	106	40 47.94 N	69 24.53 W
195/1720	14.64	10.07	11.241	32.286	24.653	2.7	50	4.9	53	67	40 49.55 N	69 22.10 W
195/1735	15.07	10.62	11.149	32.323	24.690	4.5	44	4.6	91	95	40 49.93 N	69 19.90 W
195/1750	15.39	10.03	11.215	32.235	24.610	1.9	40	4.5	80	92	40 49.99 N	69 17.05 W
195/1805	15.54	10.99	12.074	32.637	24.760	2.0	52	4.0	67	95	40 50.08 N	69 14.05 W
195/1820	15.66	10.94	12.667	33.082	24.997	2.4	59	4.8	69	100	40 50.21 N	69 10.91 W
195/1835	15.63	10.82	12.547	33.117	25.048	3.3	55	4.0	89	100	40 50.21 N	69 7.01 W
195/1850	15.55	10.74	13.012	33.096	24.939	3.4	47	4.0	91	105	40 50.22 N	69 4.23 W
195/1905	15.53	10.71	13.390	33.068	24.933	3.1	30	3.6	250	235	40 50.20 N	69 3.96 W
195/1920	15.02	11.07	13.362	33.100	24.933	3.1	30	3.6	250	235	40 50.05 N	69 5.55 W
195/1935	*****	*****	14.096	33.103	24.783	4.4	40	4.7	240	233	40 48.96 N	69 8.10 W
195/1950	17.12	12.12	13.970	33.224	24.039	4.5	52	4.6	230	233	40 47.79 N	69 18.66 W
195/2005	17.34	12.10	13.126	33.235	25.023	4.1	53	4.4	230	224	40 46.48 N	69 17.97 W
195/2020	17.31	12.11	13.607	33.196	24.895	3.7	39	4.3	232	239	40 45.84 N	69 14.91 W
195/2035	16.46	11.61	14.050	33.184	24.793	3.7	40	4.6	262	259	40 44.56 N	69 17.70 W
195/2050	16.25	11.58	14.000	33.155	24.701	3.3	55	4.6	260	267	40 44.47 N	69 20.66 W

15 MINUTE AVERAGES: Data

P16,Z	TA degC	TDP degC	TS degC	SAL ppt	SLGT g/cm**3	WS m/sec	WD deg	UHI/PS m/sec	CSE deg	UDG deg	LAT deg mins	LONG deg mins
19572105	15.91	11.20	11.059	32.832	24.960	3.7	73	4.5	265	262	40 44.38 N	69 23 57 W
19572120	14.96	10.32	11.519	32.560	24.014	4.3	72	4.5	257	250	40 43.97 N	69 26 02 W
19572135	14.61	10.10	11.407	32.424	24.736	4.3	70	4.5	251	256	40 43.30 N	69 29 19 W
19572150	14.32	10.03	11.527	32.424	24.707	4.3	72	4.5	252	256	40 42.74 N	69 31 26 W
19572205	14.40	10.32	12.440	32.424	24.532	4.5	74	4.6	254	260	40 42.11 N	69 34 00 W
19572220	14.00	10.07	12.041	32.423	24.607	4.4	03	4.6	264	267	40 41.72 N	69 37 50 W
19572235	15.13	11.17	13.434	32.422	24.332	4.6	04	4.0	264	267	40 41.52 N	69 40 00 W
19572250	15.42	11.50	13.344	32.415	24.345	4.6	03	4.0	263	267	40 41.35 N	69 43 06 W
19572305	15.66	11.22	14.498	32.117	23.874	4.7	04	4.9	264	267	40 40.97 N	69 46 00 W
19572320	15.73	11.71	14.016	32.114	23.974	4.6	93	4.9	270	275	40 40.60 N	69 50 17 W
19572335	15.69	11.64	12.948	32.111	24.109	4.0	110	5.0	274	280	40 40.90 N	69 53 36 W
19572350	15.67	11.63	14.309	32.121	23.917	4.3	117	5.0	280	290	40 41.59 N	69 56 14 W
19670005	15.59	11.60	14.164	32.367	24.130	4.1	110	5.1	207	298	40 42.32 N	69 59 53 W
19670020	15.68	11.73	14.570	32.201	23.906	4.1	112	5.1	204	290	40 42.96 N	70 2 09 W
19670035	15.90	11.96	13.720	32.209	24.108	4.7	111	5.2	204	290	40 43.57 N	70 5 00 W
19670050	16.05	12.12	14.147	32.103	23.930	5.0	107	5.2	205	290	40 44.22 N	70 9 11 W
19670105	16.11	12.21	14.630	32.011	23.763	4.6	111	5.2	205	289	40 44.93 N	70 12 33 W
19670121	16.28	12.44	16.602	31.805	23.169	4.7	109	5.1	205	289	40 45.50 N	70 15 55 W
19670136	16.55	12.75	18.027	31.665	22.531	7.9	110	5.1	206	289	40 46.24 N	70 18 22 W
19670151	16.03	13.04	18.622	31.643	22.565	4.3	122	5.1	200	292	40 46.90 N	70 21 06 W
19670206	17.00	13.21	18.414	31.654	22.624	4.0	120	5.1	207	292	40 47.74 N	70 25 03 W
19670221	17.14	13.35	18.638	31.640	22.565	4.1	123	5.1	200	291	40 48.50 N	70 28 12 W
19670236	17.27	13.47	18.765	31.645	22.531	3.9	124	5.1	200	291	40 49.20 N	70 31 20 W
19070004	15.89	15.12	12.005	31.734	23.925	7.2	231	6.0	101	103	40 52.27 N	69 43 10 W
19070020	16.72	15.97	12.374	31.859	24.107	6.1	246	2.3	192	209	40 50.33 N	69 43 05 W
19070030	17.09	16.30	12.010	31.961	24.256	7.3	234	5.3	172	177	40 48.65 N	69 42 23 W
19070053	17.45	16.63	11.630	32.152	24.476	7.1	252	5.2	106	200	40 45.93 N	69 42 09 W
19070900	17.92	17.08	11.270	32.203	24.502	5.5	259	2.6	190	145	40 45.19 N	69 42 41 W
19070923	16.76	15.97	11.314	32.209	24.500	6.9	236	6.7	01	08	40 45.64 N	69 40 22 W
19070938	16.22	15.44	11.423	32.358	24.675	7.1	237	6.7	90	100	40 45.04 N	69 34 41 W
19070953	15.80	15.00	11.470	32.583	24.841	7.3	256	6.5	112	109	40 45.54 N	69 30 16 W
19071008	15.95	15.17	11.419	32.458	24.753	7.5	254	2.6	08	137	40 45.12 N	69 27 30 W
19071023	16.13	15.36	11.395	32.490	24.782	7.1	256	6.5	235	67	40 47.15 N	69 27 06 W
19071038	15.71	14.92	11.417	32.308	24.631	7.4	244	3.5	231	293	40 49.77 N	69 27 10 W
19071053	15.01	14.19	11.451	32.419	24.717	7.6	257	6.0	320	354	40 51.02 N	69 27 24 W
19071108	14.77	13.93	11.460	32.106	24.535	0.0	239	4.5	172	174	40 54.65 N	69 27 00 W
19071123	15.16	14.31	11.555	32.195	24.523	5.1	235	4.7	245	266	40 54.04 N	69 28 50 W
19071130	15.46	14.61	11.678	32.142	24.459	5.7	234	4.4	271	270	40 54.04 N	69 31 24 W
19071153	16.00	15.17	11.824	32.076	24.300	5.4	237	4.3	273	270	40 54.91 N	69 34 54 W
19071208	15.50	14.73	12.155	31.900	24.242	6.9	247	2.5	190	209	40 55.47 N	69 35 21 W
19071233	15.27	14.40	12.345	31.844	24.100	7.6	240	6.5	262	336	40 58.17 N	69 35 59 W
19071253	15.46	14.60	12.328	31.843	24.103	7.7	240	7.5	93	153	40 59.96 N	69 35 00 W
19071308	15.73	14.87	13.072	31.669	23.022	6.9	265	6.3	329	355	41 2.20 N	69 35 50 W
19071323	15.92	15.25	13.271	31.598	23.727	6.3	295	3.0	237	105	41 4.65 N	69 35 07 W
19071338	15.40	14.62	13.291	31.601	23.725	6.0	227	3.2	149	160	41 4.09 N	69 35 19 W
19071354	15.56	14.67	13.077	31.641	23.799	5.6	227	2.3	150	161	41 2.01 N	69 34 47 W
19071409	15.33	14.41	12.006	31.668	23.650	6.0	220	2.1	167	161	41 1.00 N	69 34 05 W
			12.671	31.711	23.934	5.9	223	2.0	162	160	41 1.00 N	69 33 63 W

15 RINDICE AGRICOLA 1961A

DTG.2	TA	TDP	TS	SAL	SIGT	W3	W6	SUUPS	USE	HBC	LAI	THG
	degC	degC	degC	ppt	g/cm ² s	m/sec	deg	m/sec	deg	deg	deg	deg
190/1424	15.42	14.48	12.170	31.799	24.108	6.1	220	1.7	166	160	40.59.97.8	69.33.30.3
190/1439	16.12	15.17	12.047	31.026	24.144	6.5	224	1.6	173	160	40.59.19.8	69.33.17.0
190/1454	15.05	14.07	11.960	31.032	24.164	6.2	223	1.0	171	160	40.50.35.8	69.32.94.3
190/1509	15.95	14.95	11.954	31.030	24.165	5.6	220	1.9	173	169	40.57.44.8	69.32.79.0
190/1524	15.95	14.93	12.019	31.029	24.151	6.4	230	1.9	172	167	40.56.54.8	69.32.60.0
190/1539	15.92	14.86	12.040	31.042	24.157	4.7	239	1.0	274	322	40.56.09.8	69.33.12.0
190/1554	15.48	14.34	12.017	31.026	24.150	4.0	227	1.7	319	330	40.56.60.8	69.33.06.3
190/1609	15.51	14.40	12.056	31.028	24.144	5.1	220	1.0	320	342	40.57.33.8	69.34.60.0
190/1624	15.87	14.80	12.104	31.004	24.101	5.6	220	1.0	322	345	40.58.02.8	69.35.33.0
190/1639	16.11	15.06	12.235	31.703	24.075	4.0	227	1.0	323	307	40.58.75.8	69.36.01.0
190/1654	15.00	14.03	11.964	31.003	24.142	5.5	214	2.9	140	121	40.50.57.8	69.35.51.0
190/1709	15.32	14.29	11.530	31.048	24.257	6.1	216	4.4	139	137	40.57.19.8	69.33.53.0
190/1724	15.48	14.45	11.765	31.055	24.220	6.2	221	4.6	153	150	40.55.21.8	69.31.55.0
190/1739	15.33	14.29	11.008	31.900	24.247	6.5	210	2.7	149	142	40.53.66.8	69.30.03.0
190/1754	15.30	14.33	11.003	32.055	24.368	7.6	213	3.9	171	164	40.52.22.8	69.30.23.0
190/1809	15.06	14.02	11.714	32.225	24.517	8.1	216	4.5	177	174	40.50.06.8	69.30.01.0
190/1824	16.41	15.39	11.634	32.402	24.669	8.2	215	3.9	179	170	40.40.07.8	69.29.57.0
190/1839	16.82	15.80	11.586	32.553	24.796	7.5	213	3.6	180	170	40.46.25.8	69.29.95.0
190/1854	16.98	15.94	11.568	32.579	24.819	7.7	217	3.4	181	175	40.44.53.8	69.29.52.0
190/1909	17.14	16.05	11.581	32.593	24.838	7.1	213	3.4	180	171	40.42.05.8	69.29.99.0
190/1924	17.35	16.13	11.567	32.503	24.832	7.2	216	3.2	178	174	40.41.25.8	69.29.53.0
190/1939	17.44	16.07	11.534	32.543	24.798	6.8	231	3.0	147	127	40.39.92.8	69.29.65.0
190/1954	16.69	15.06	11.663	32.623	24.835	7.5	216	3.0	162	98	40.39.07.8	69.27.17.0
190/2009	17.03	15.24	11.729	32.593	24.800	7.7	210	5	134	100	40.40.00.8	69.26.59.0
190/2024	16.67	14.69	11.620	32.607	24.831	7.0	211	3.5	04	90	40.40.14.8	69.25.21.0
190/2039	16.04	14.06	11.024	32.699	24.064	8.1	217	3.4	84	90	40.40.32.8	69.22.95.0
190/2054	16.55	14.40	12.095	32.704	24.870	7.9	223	3.5	69	81	40.40.60.8	69.20.15.0
190/2109	16.55	14.16	12.480	32.855	24.056	8.1	220	3.7	57	77	40.41.63.8	69.10.01.0
190/2124	17.13	14.64	13.212	32.915	24.758	8.5	217	3.7	56	65	40.42.65.8	69.16.10.0
190/2139	19.04	16.96	14.627	33.262	24.731	7.3	257	3.3	143	134	40.42.22.8	69.15.47.0
190/2154	19.00	17.01	16.672	33.261	24.225	5.6	198	3.0	134	124	40.40.05.8	69.13.67.0
190/2209	20.11	18.04	17.720	33.267	24.027	6.9	211	1.2	66	135	40.40.51.8	69.12.74.0
190/2224	20.40	18.10	18.241	33.243	23.883	7.0	216	4.4	125	135	40.49.22.8	69.10.56.0
190/2239	20.70	18.32	18.030	33.216	23.914	7.5	228	3.9	217	242	40.30.09.8	69.10.07.0
190/2254	20.44	17.08	17.175	33.259	24.153	7.6	215	5.1	280	274	40.39.23.8	69.12.56.0
190/2310	*****	*****	14.559	33.295	24.771	*****	***	5.0	207	207	40.39.93.8	69.16.40.0
190/2325	*****	*****	13.397	33.035	24.013	*****	***	6.4	270	266	40.48.44.8	69.20.23.0
199/0004	16.33	14.35	11.617	32.507	24.754	5.5	240	4.5	296	326	40.40.32.8	69.22.73.0
199/0019	15.04	13.90	11.586	32.439	24.707	6.3	221	3.0	41	355	40.42.14.8	69.29.17.0
199/0034	16.06	14.39	11.470	32.423	24.715	6.6	220	3.7	2	356	40.43.90.8	69.29.76.0
199/0099	16.16	14.68	11.422	32.371	24.605	6.7	219	3.6	3	355	40.45.76.8	69.29.63.0
199/0104	16.21	14.87	11.515	32.301	24.613	6.9	219	3.4	5	356	40.47.46.8	69.29.47.0
199/0119	15.59	14.30	11.653	32.339	24.617	6.5	216	3.7	2	354	40.49.10.8	69.29.36.0
199/0134	16.00	14.79	11.608	32.401	24.658	7.4	214	3.6	319	353	40.50.97.8	69.29.37.0
199/0149	15.48	14.31	11.734	32.271	24.549	8.1	214	3.5	355	354	40.52.75.8	69.29.56.0
199/0204	15.29	14.16	11.005	32.000	24.387	8.3	210	2.6	222	199	40.53.00.8	69.29.44.0
199/0219	14.28	13.14	11.775	32.140	24.439	7.0	209	3.3	107	91	40.53.73.8	69.27.56.0
199/0234	14.12	12.99	11.713	32.200	24.490	7.1	212	3.1	102	91	40.53.42.8	69.25.56.0

15 MINUTE AVERAGES: DATA

DATE	TA	TDP	TS	SAL	SUCT	MS	MB	SHIPS	ESC	HOG	LAI	LHOG
	degC	degC	degC	ppt	g/cm ³	m/sec	deg	m/sec	deg	deg	deg	deg
1997/0249	13.85	12.74	11.550	32.155	24.494	7.1	213	2.9	94	81	40 53 22 N	69 23 65 W
1997/0304	13.85	12.76	11.379	32.065	24.455	7.4	214	2.8	96	80	40 53 32 N	69 24 04 W
1997/0319	14.42	13.37	11.398	32.064	24.451	7.5	214	2.5	60	56	40 53 33 N	69 20 25 W
1997/0334	15.15	14.14	11.404	32.118	24.492	8.3	220	2.6	65	61	40 53 30 N	69 18 27 W
1997/0349	15.27	14.27	11.397	32.215	24.569	8.8	218	2.9	117	101	40 53 72 N	69 17 15 W
1997/0405	15.40	14.43	11.431	32.210	24.565	8.4	223	2.7	135	103	40 52 70 N	69 15 69 W
1997/0420	15.59	14.64	11.308	32.365	24.687	7.6	217	2.4	150	125	40 51 02 U	69 14 16 W
1997/0435	15.15	14.19	11.701	32.571	24.788	6.6	214	2.6	152	125	40 50 71 N	69 14 07 W
1997/0450	14.87	13.90	13.000	32.738	24.662	6.4	205	2.6	151	117	40 49 68 N	69 13 22 W
1997/0505	15.94	15.02	14.561	32.855	24.431	6.2	233	3.5	153	122	40 48 23 N	69 12 30 W
1997/0520	17.52	16.59	14.464	32.856	24.452	6.3	196	2.4	138	106	40 47 09 N	69 11 24 W
1997/0535	17.77	16.82	14.656	32.856	24.431	5.7	196	2.1	148	131	40 46 17 N	69 10 48 W
1997/0550	17.69	16.93	14.716	32.856	24.350	6.9	209	1.5	312	339	40 46 25 N	69 10 69 W
1997/0605	17.94	16.97	13.437	32.856	24.666	7.4	211	1.5	315	343	40 46 02 N	69 11 43 W
1997/0620	17.53	16.58	12.370	32.956	24.950	6.9	215	1.5	324	32	40 47 37 N	69 12 04 W
1997/0635	17.08	16.14	12.044	32.993	25.050	6.5	221	1.3	337	125	40 47 22 N	69 12 13 W
1997/0650	16.60	15.66	11.725	32.816	24.924	7.1	213	1.3	330	197	40 40 59 N	69 12 26 W
1997/0705	16.21	15.25	11.613	32.490	24.740	7.4	209	1.3	333	208	40 49 17 N	69 13 17 W
1997/0720	16.08	15.12	11.485	32.371	24.673	7.3	210	1.4	329	256	40 49 25 N	69 13 56 W
1997/0735	15.80	14.83	11.288	32.358	24.701	7.5	226	1.6	296	125	40 50 26 N	69 14 11 W
1997/0805	16.19	15.23	11.404	32.277	24.600	7.6	208	1.5	154	107	40 49 16 N	69 13 05 W
1997/0820	16.74	15.78	12.463	32.664	24.714	7.4	204	1.5	151	107	40 48 51 N	69 12 16 W
1997/0835	16.90	16.02	12.573	32.854	24.838	6.7	211	1.4	128	105	40 48 22 N	69 12 02 W
1997/0850	17.22	16.22	12.910	32.845	24.765	7.6	201	1.7	279	312	40 48 54 N	69 12 03 W
1997/0905	17.05	16.07	12.368	32.486	24.594	7.9	201	1.9	320	284	40 49 27 N	69 12 06 W
1997/0920	17.03	16.01	11.582	32.342	24.640	8.3	211	1.4	199	90	40 50 00 N	69 13 18 W
1997/0935	16.36	15.34	11.523	32.407	24.694	8.8	194	1.4	194	106	40 50 24 N	69 13 27 W
1997/0950	16.52	15.49	11.571	32.252	24.565	8.4	254	1.7	236	96	40 50 58 N	69 13 59 W
1997/1005	17.13	16.08	12.505	32.341	24.455	9.3	226	1.9	154	165	40 50 34 N	69 13 04 W
1997/1020	17.59	16.52	13.059	32.886	24.767	8.2	206	1.7	164	184	40 49 27 N	69 13 04 W
1997/1035	17.51	16.43	13.000	32.836	24.724	7.7	214	1.9	293	98	40 50 20 N	69 13 17 W
1997/1051	17.46	16.39	13.215	32.867	24.728	8.4	208	1.0	229	78	40 50 25 N	69 13 15 W
1997/1106	17.56	16.46	13.208	32.889	24.740	8.4	213	1.8	104	150	40 51 26 N	69 13 05 W
1997/1121	17.71	16.58	13.364	32.959	24.761	8.2	218	1.8	227	103	40 51 27 N	69 12 22 W
1997/1136	17.95	16.79	13.112	32.927	24.788	6.3	257	1.0	190	200	40 52 05 N	69 12 29 W
1997/1151	17.91	16.75	13.054	32.908	24.785	9.3	237	1.6	137	162	40 52 54 N	69 12 62 W
1997/1206	17.67	16.52	13.134	32.949	24.800	9.4	198	1.2	251	96	40 53 07 N	69 12 37 W
1997/1221	17.55	16.40	13.470	32.940	24.725	9.6	209	1.3	14	98	40 53 69 N	69 12 11 W
1997/1236	17.82	16.66	12.780	32.922	24.849	11.2	201	2.1	250	250	40 54 44 N	69 12 37 W
1997/1251	17.62	16.47	12.434	32.943	24.935	8.9	250	2.3	93	100	40 54 36 N	69 11 50 W
1997/1306	17.43	16.28	12.677	32.998	24.930	8.7	193	1.2	37	97	40 54 29 N	69 11 05 W
1997/1321	17.69	16.52	12.795	32.982	24.894	8.7	208	1.9	111	194	40 55 21 N	69 10 23 W
1997/1336	17.94	16.75	12.288	32.996	25.021	8.4	212	1.7	142	261	40 55 40 N	69 10 21 W
1997/1351	17.92	16.28	12.520	32.982	24.949	10.0	159	1.0	47	294	40 55 22 N	69 10 30 W
1997/1406	17.62	16.47	12.828	32.987	24.891	9.9	202	1.9	44	266	40 56 40 N	69 9 85 W
1997/1421	18.23	17.04	12.804	33.003	25.066	9.3	218	1.7	147	150	40 55 29 N	69 9 68 W
1997/1436	18.08	16.82	12.329	32.998	24.998	9.7	193	1.8	69	108	40 55 27 N	69 9 10 W

15. HEDRIC AVERAGES: DATA

DATE, Z	LA	LONG	TS	SAL	STRT	MS	WD	SPEED	CSL	HDE	TA	Udeg
	degC	degE	degE	gpt	g/cm ³	m/sec	deg	m/sec	deg	deg	deg	deg
1997/1451	17.94	16.75	12.54	32.580	24.943	9.6	208	7	156	214	48 56 45 N	69 11 29 W
1997/1506	18.18	16.06	12.454	32.913	24.912	9.7	202	4	174	135	40 56 13 N	69 11 00 W
1997/1521	18.19	16.98	12.457	32.913	24.913	10.1	214	9	174	169	43 56 00 N	69 11 41 W
1997/1536	18.39	17.89	12.507	32.948	24.918	9.9	205	1.1	61	202	48 56 22 N	69 11 16 W
1997/1551	18.01	16.74	12.603	32.920	24.935	10.0	159	5	93	206	48 56 36 N	69 11 02 W
1997/1606	18.25	16.97	12.745	32.977	24.961	11.1	215	1.2	136	226	48 56 48 N	69 11 56 W
1997/1621	18.49	17.24	12.265	32.933	24.961	11.9	224	1.0	155	213	48 55 24 N	69 11 46 W
1997/1636	18.29	17.05	12.519	32.926	24.905	7.8	237	1.7	106	232	40 51 63 N	69 11 39 W
1997/1651	18.30	17.14	12.420	32.953	24.946	7.0	248	1.0	173	242	40 53 94 N	69 11 44 W
1997/1706	18.30	17.05	12.619	32.945	24.961	7.0	243	9	64	52	40 53 91 N	69 11 02 W
1997/1721	17.91	16.64	13.081	32.927	24.994	7.2	241	1.0	110	150	40 54 06 N	69 11 59 W
1997/1736	17.64	16.41	12.812	32.918	24.841	5.6	245	1.8	204	255	40 53 43 N	69 11 06 W
1997/1752	17.92	16.68	12.679	32.930	24.883	6.5	243	1.2	176	184	40 52 28 N	69 11 09 W
1997/1807	18.31	17.05	12.993	32.938	24.821	6.2	243	1.2	62	68	40 52 28 N	69 11 04 W
1997/1822	17.82	16.47	13.189	32.968	24.884	6.6	237	1.5	170	242	40 52 65 N	69 11 55 W
1997/1837	17.74	16.43	12.730	32.922	24.859	7.0	242	1.3	183	234	40 51 84 N	69 11 08 W
1997/1852	17.54	16.27	12.895	32.925	24.830	9.4	217	1.6	160	320	40 51 57 N	69 11 00 W
1997/1907	17.41	16.18	12.866	32.918	24.830	9.3	218	1.8	264	223	40 51 45 N	69 11 52 W
1997/1922	16.81	15.58	12.772	32.906	24.840	8.7	210	1.8	191	161	40 51 30 N	69 11 52 W
1997/1937	16.73	15.52	12.769	32.927	24.856	9.2	210	1.6	220	115	40 51 46 N	69 11 46 W
1997/1952	17.49	16.31	12.849	32.918	24.834	8.9	209	7	204	127	40 58 86 N	69 11 45 W
1997/2007	17.81	16.64	12.822	32.924	24.814	8.6	208	4	152	119	40 58 28 N	69 11 52 W
1997/2022	18.45	17.27	12.906	32.984	24.874	11.1	238	7	121	223	40 58 51 N	69 11 51 W
1997/2037	18.08	16.93	12.996	32.915	24.802	9.5	215	7	266	154	40 58 26 N	69 11 20 W
1997/2052	18.12	16.97	12.879	32.929	24.836	8.1	214	7	253	170	40 58 29 N	69 11 25 W
1997/2107	18.13	17.00	13.839	32.968	24.828	9.5	210	9	163	190	40 58 28 N	69 11 20 W
1997/2122	18.05	16.93	12.947	32.882	24.786	8.5	209	9	271	276	40 51 85 N	69 11 16 W
1997/2137	17.66	16.57	12.892	32.759	24.702	8.3	207	9	382	266	40 51 30 N	69 11 00 W
1997/2152	17.97	16.68	12.807	32.851	24.790	9.2	246	9	143	121	40 51 45 N	69 11 52 W
1997/2207	18.07	16.98	12.960	32.878	24.774	9.6	194	7	17	186	48 51 66 N	69 11 02 W
1997/2222	18.09	17.01	12.943	32.858	24.768	9.3	218	1.0	254	261	40 51 94 N	69 11 16 W
1997/2237	17.88	16.81	12.951	32.771	24.699	9.8	206	1.0	78	285	40 52 39 N	69 11 26 W
1997/2252	18.08	17.81	12.846	32.875	24.881	6.8	217	1.6	181	245	40 52 65 N	69 11 29 W
1997/2307	17.81	16.75	12.903	32.889	24.800	9.6	211	7	144	142	40 52 99 N	69 11 19 W
1997/2322	17.88	16.82	12.893	32.964	24.860	9.8	220	1.6	212	44	40 53 28 N	69 11 23 W
1997/2337	17.86	16.81	13.084	32.927	24.809	10.1	209	1.1	86	125	40 53 22 N	69 11 00 W
1997/2352	17.31	16.28	12.830	32.682	24.655	10.0	195	1.4	225	279	40 54 48 N	69 11 59 W
2000/0007	17.44	16.40	12.816	32.624	24.612	10.8	263	1.8	108	225	40 54 92 N	69 11 30 W
2000/0022	17.59	16.55	13.118	32.891	24.758	9.3	242	1.2	77	120	40 55 18 N	69 11 25 W
2000/0037	17.42	16.38	13.218	32.936	24.774	10.1	220	1.5	93	174	40 55 59 N	69 11 46 W
2000/0052	17.51	16.48	12.595	32.994	24.633	10.3	202	1.3	224	275	40 56 19 N	69 11 51 W
2000/0107	17.52	16.49	12.631	32.885	24.634	10.1	218	1.2	68	191	40 56 61 N	69 11 27 W
2000/0123	17.80	16.83	13.070	32.900	24.775	8.4	212	1.8	111	192	40 56 47 N	69 11 39 W
2000/0138	17.42	16.39	12.877	32.883	24.739	10.0	204	1.9	180	260	40 56 92 N	69 11 08 W
2000/0153	17.85	16.84	12.399	32.493	24.593	10.1	206	1.8	95	234	40 52 67 N	69 11 14 W
2000/0208	17.20	16.26	12.930	32.846	24.762	9.9	212	1.5	150	179	40 52 33 N	69 11 00 W
2000/0223	17.29	16.26	13.118	32.879	24.749	9.5	214	1.1	135	300	40 52 38 N	69 11 06 W
2000/0238	16.76	15.73	12.422	32.471	24.562	10.8	201	1.1	232	296	40 52 99 N	69 11 52 W

15 MINUTE AVERAGES: DATA

DATE, Z	TA degC	TDP degC	TS degC	SAL ppt	SIGT g/cm ³	WS m/sec	WD deg	SHIPS m/sec	CSE deg	HOG deg	LAI deg min	LONG deg min
200/0253	16.86	15.84	12.475	32.529	24.606	10.2	216	0	139	234	48 50 07.0	69 6 46.0
200/0308	17.28	16.22	12.054	32.681	24.649	9.9	224	1.4	103	223	40 57 30.0	69 6 57.0
200/0323	17.06	16.01	12.914	32.760	24.704	9.8	221	1.4	50	124	40 57 41.0	69 6 57.0
200/0338	17.01	15.94	12.523	32.575	24.633	9.3	215	1.5	177	267	40 57 02.0	69 6 07.0
200/0353	17.41	16.32	12.719	32.735	24.717	9.8	230	1.9	206	235	48 57 22.0	69 6 40.0
200/0400	17.20	16.11	12.476	32.576	24.643	7.7	231	1.7	103	170	40 56 46.0	69 6 27.0
200/0423	17.35	16.26	12.066	32.912	24.826	10.2	226	1.9	63	74	40 56 71.0	69 6 23.0
200/0438	17.26	16.16	12.004	32.879	24.812	10.0	229	1.7	198	253	40 56 51.0	69 6 01.0
200/0453	16.73	15.62	12.570	32.657	24.607	5.0	230	1.7	214	243	40 55 07.0	69 6 24.0
200/0508	16.53	15.41	12.808	32.785	24.739	0.4	232	1.2	138	06	40 55 26.0	69 6 26.0
200/0523	16.39	15.27	12.399	32.576	24.658	0.5	226	1.6	107	145	40 55 26.0	69 6 25.0
200/0538	16.60	15.56	12.305	32.541	24.633	7.2	239	1.5	195	230	40 54 79.0	69 6 24.0
200/0553	16.71	15.58	12.479	32.665	24.711	6.1	246	1.0	200	237	40 54 00.0	69 7 27.0
200/0608	16.79	15.64	12.449	32.559	24.634	5.7	245	1.4	199	240	40 53 25.0	69 7 65.0
200/0623	17.05	15.88	12.439	32.526	24.611	7.0	245	1.2	196	239	40 52 65.0	69 7 00.0
200/0638	16.65	15.45	12.547	32.665	24.698	0.6	235	1.3	149	136	40 52 11.0	69 7 27.0
200/0653	16.69	15.48	12.447	32.730	24.774	9.6	239	1.5	96	125	40 52 14.0	69 7 41.0
200/0708	17.11	15.90	12.338	32.587	24.678	6.7	245	2.0	212	237	40 53 63.0	69 8 00.0
200/0723	17.05	15.79	12.444	32.786	24.811	0.1	241	1.6	204	231	40 50 79.0	69 0 56.0
200/0738	16.52	15.25	12.474	32.820	24.832	0.0	242	1.4	102	90	40 50 42.0	69 0 50.0
200/0753	17.12	15.84	12.317	32.566	24.666	9.9	247	1.2	177	215	40 50 41.0	69 0 10.0
200/0808	17.44	16.17	12.326	32.574	24.670	9.1	252	1.5	230	255	40 49 40.0	69 0 05.0
200/0824	17.05	15.81	12.269	32.608	24.704	0.6	252	1.5	230	252	40 49 49.0	69 9 56.0
200/0839	16.63	15.39	12.307	32.602	24.695	9.0	204	1.7	224	204	40 49 17.0	69 10 13.0
200/0854	16.68	15.37	12.334	32.732	24.791	9.2	207	1.7	219	174	40 49 13.0	69 10 29.0
200/0909	16.86	15.63	12.210	32.944	24.980	10.3	223	1.1	201	200	40 40 69.0	69 10 41.0
200/0924	16.80	15.65	12.314	32.948	24.963	9.1	211	1.0	203	197	40 40 46.0	69 10 04.0
200/0939	16.56	15.32	12.255	32.700	24.782	9.0	206	1.3	326	297	40 49 06.0	69 10 92.0
200/0954	17.00	15.76	12.273	32.651	24.748	10.7	230	1.1	230	214	40 48 59.0	69 11 28.0
200/1009	17.09	15.84	12.285	32.932	24.956	9.2	230	1.9	262	210	40 40 57.0	69 11 64.0
200/1024	16.74	15.48	12.268	32.608	24.778	9.4	228	1.7	83	185	40 49 05.0	69 11 49.0
200/1039	17.00	15.75	12.032	32.523	24.688	8.4	224	1.2	274	242	40 49 43.0	69 11 57.0
200/1054	17.24	16.01	12.401	32.771	24.808	7.6	231	1.0	171	223	40 49 02.0	69 12 09.0
200/1109	16.60	15.41	12.401	32.771	24.808	7.6	231	1.0	171	223	40 49 02.0	69 12 09.0
200/1124	16.88	15.61	12.353	32.699	24.762	9.2	207	1.7	70	89	40 49 42.0	69 11 54.0
200/1139	16.97	15.69	12.010	32.555	24.715	9.3	216	1.2	170	223	40 49 05.0	69 11 22.0
200/1154	16.90	15.61	12.249	32.763	24.832	10.3	202	1.3	66	120	40 50 14.0	69 12 06.0
200/1209	17.13	15.83	12.527	32.734	24.755	10.0	202	1.1	31	119	40 50 61.0	69 11 40.0
200/1224	17.00	15.76	12.503	32.691	24.726	9.1	212	1.2	55	170	40 51 17.0	69 10 56.0
200/1239	17.01	15.67	12.247	32.685	24.772	0.7	206	1.9	312	270	40 51 25.0	69 11 51.0
200/1254	16.80	15.45	12.113	32.866	24.938	9.1	202	1.0	180	146	40 52 36.0	69 11 20.0
200/1309	16.95	15.58	12.331	32.795	24.841	9.6	198	1.5	75	122	40 52 53.0	69 11 02.0
200/1324	17.29	15.87	12.525	32.777	24.789	10.0	197	1.8	73	113	40 52 73.0	69 10 27.0
200/1339	18.11	16.64	13.084	33.071	24.905	10.2	203	2.5	128	141	40 52 15.0	69 0 05.0
200/1354	18.32	16.83	13.270	33.073	24.869	10.2	204	2.1	146	150	40 51 29.0	69 0 05.0
200/1409	18.84	17.31	13.723	33.187	25.067	10.7	230	1.8	147	203	40 50 44.0	69 7 37.0
200/1424	18.65	17.14	13.240	33.193	24.967	10.7	235	1.2	114	293	40 50 49.0	69 7 10.0
200/1439	18.79	17.27	13.799	33.130	24.804	10.4	232	3.0	271	265	40 50 67.0	69 0 46.0

15 MINUTE AVERAGES: DATA

DTG-Z	TA	TDP	TS	SAL	SIGT	WS	WB	SHIPS	CSE	UDC	LAC	LORC	
	degC	degE	degE	ppt	g/cm**3	m/sec	deg	m/sec	deg	deg	mins	mins	
200/1454	10.74	17.21	12.793	33.246	25.099	10.7	221	3.0	262	265	40 50.49 N	69 10.76 W	
200/1509	17.70	16.27	12.747	33.237	25.101	9.6	239	3.9	267	260	40 50.33 N	69 13.50 W	
200/1524	16.72	15.03	11.031	32.070	24.996	10.4	232	3.9	265	270	40 50.19 N	69 15.79 W	
200/1540	16.00	15.37	11.694	32.704	24.897	9.7	210	4.2	274	277	40 50.22 N	69 10.45 W	
200/1555	16.06	15.49	11.670	32.666	24.060	10.0	217	4.1	274	275	40 50.42 N	69 21.09 W	
200/1610	17.39	16.06	11.675	32.544	24.772	10.3	219	4.4	266	271	40 50.33 N	69 23.02 W	
200/1625	17.20	15.60	11.080	32.572	24.755	9.9	213	4.4	266	273	40 50.18 W	69 26.74 W	
200/1640	17.46	16.16	12.070	32.410	24.591	10.4	211	3.7	263	273	40 39.11 N	69 11.11 W	
200/1655	17.22	16.34	12.267	32.350	24.514	9.1	207	4.6	260	275	40 49.01 N	69 37.59 W	
200/1710	*****	*****	12.761	32.350	24.417	0.3	202	2.4	245	273	40 49.92 N	69 39.01 W	
200/1725	17.63	16.29	12.683	32.350	24.393	7.9	221	7	152	163	40 49.07 N	69 35.01 W	
200/1740	17.90	16.60	12.785	32.350	24.413	7.3	216	1.0	203	211	40 49.71 N	69 35.72 W	
200/1755	17.64	16.27	12.973	32.350	24.375	6.7	209	7	215	226	40 49.20 N	69 35.41 W	
200/1810	18.24	16.02	12.860	31.913	24.051	7.9	224	4	07	55	40 49.28 W	69 35.40 W	
200/1825	18.40	16.91	12.702	31.926	24.094	7.4	216	1.0	25	51	40 49.63 W	69 35.22 W	
200/1840	17.74	16.23	12.555	32.012	24.190	8.1	299	5	92	85	40 49.91 W	69 34.90 W	
200/1855	17.75	16.27	12.856	31.995	24.110	0.2	12	6	150	112	40 49.70 W	69 35.03 W	
200/1910	17.84	16.37	12.787	32.014	24.146	8.1	91	5	201	111	40 49.46 W	69 35.13 W	
200/1925	17.91	16.43	12.630	32.040	24.201	8.3	68	5	197	112	40 49.21 W	69 35.21 W	
200/1940	18.06	16.55	12.504	32.077	24.251	0.6	214	5	240	150	40 49.07 W	69 35.47 W	
200/1955	18.25	16.74	12.291	32.109	24.316	6.9	210	1.1	223	220	40 48.76 W	69 35.27 W	
200/2010	18.01	16.47	12.496	32.095	24.265	8.4	200	1.2	253	261	40 48.50 W	69 36.52 W	
200/2025	17.74	16.23	12.832	32.034	24.152	0.0	159	1.1	200	260	40 40.51 W	69 37.56 W	
200/2040	17.52	16.04	13.126	31.891	23.903	7.2	240	1.4	303	322	40 40.00 W	69 30.19 W	
200/2055	17.85	16.27	12.846	31.924	24.064	6.6	210	1.4	307	233	40 49.36 W	69 30.63 W	
200/2110	18.32	16.62	12.680	31.954	24.119	7.2	294	1.2	25	66	40 49.91 W	69 30.50 W	
200/2125	17.44	15.60	12.572	31.994	24.172	7.5	197	1.0	67	94	40 50.27 W	69 30.02 W	
200/2140	17.14	15.22	12.379	32.055	24.257	7.0	192	0	94	121	40 50.35 W	69 37.46 W	
200/2155	17.21	15.30	12.250	32.100	24.308	9.0	201	1.0	141	160	40 50.13 W	69 37.16 W	
200/2210	17.51	15.66	12.217	32.152	24.364	9.6	207	3.0	173	171	40 49.09 W	69 36.96 W	
200/2225	17.85	16.10	12.097	32.235	24.452	9.3	199	4.2	169	161	40 47.15 W	69 36.40 W	
200/2240	18.44	16.77	11.920	32.311	24.544	7.0	220	2.4	196	225	40 45.52 W	69 36.10 W	
200/2255	17.67	16.07	11.963	32.336	24.556	0.3	231	4.6	81	90	40 46.15 W	69 34.00 W	
200/2311	16.31	14.60	11.961	32.432	24.631	9.0	228	5.3	80	122	40 47.99 W	69 31.94 W	
200/2326	15.58	13.93	11.694	32.520	24.712	8.0	200	6.0	55	77	40 49.81 W	69 29.73 W	
200/2341	15.13	13.50	11.749	32.400	24.646	8.9	210	7.1	62	80	40 51.50 W	69 25.76 W	
200/2356	15.30	13.74	11.627	32.282	24.578	9.6	202	4.9	65	104	40 52.67 W	69 21.60 W	
201/0011	16.08	14.60	11.456	32.310	24.631	9.9	220	3.2	41	70	40 53.75 W	69 20.23 W	
201/0026	16.71	15.31	11.320	32.314	24.660	11.6	226	4.0	46	71	40 55.17 W	69 18.46 W	
201/0041	16.52	15.15	11.415	32.147	24.513	10.2	220	3.6	51	73	40 56.42 W	69 16.56 W	
201/0056	16.32	14.98	11.550	32.207	24.534	8.1	227	3.6	41	71	40 57.64 W	69 15.00 W	
201/0111	14.65	13.27	11.532	32.317	24.622	0.3	227	3.7	40	71	40 59.01 W	69 13.46 W	
201/0126	15.59	14.29	11.221	32.460	24.014	10.0	220	3.7	34	56	41	93 W	69 12.02 W
201/0141	15.97	14.71	11.068	32.622	24.946	11.7	232	3.9	21	37	41	2 16 W	69 10.99 W
201/0156	16.03	14.79	10.700	32.670	25.051	12.2	233	3.7	29	37	41	3 70 W	69 9.05 W
201/0211	16.15	14.94	10.695	32.627	25.010	12.7	223	2.7	66	111	41	5.08 W	69 0.92 W
201/0226	16.71	15.55	11.151	32.513	24.846	11.3	210	1.6	169	182	41	4 62 W	69 8.52 W
201/0241	16.56	15.41	11.347	32.529	24.822	11.0	223	1.9	166	108	41	3 73 W	69 8.20 W

35 MINUTE AVERAGES DATA

DUT, Z	TA degC	TOP degC	TS degC	SAT ppt	SGT q/cnAA3	WS m/sec	W0 deg	SHPB m/sec	CSF deg	HDE deg	IAC deg mins	LOHC deg mins
201/0256	17.31	16.18	11.378	32.529	24.816	12.1	232	2.3	175	201	41 2 67 N	69 7 97 W
201/0311	16.93	15.81	11.560	32.538	24.789	12.4	235	2.2	103	209	41 1 57 N	69 7 93 W
201/0326	16.61	15.48	11.722	32.467	24.704	11.4	235	2.4	202	216	41 5 4 N	69 8 42 W
201/0341	16.60	15.45	11.533	32.595	24.839	11.5	239	2.6	169	217	40 59 33 N	69 8 69 W
201/0356	16.90	15.75	11.716	32.668	24.676	7.9	240	2.0	155	231	40 58 03 N	69 8 98 W
201/0411	17.05	15.90	11.967	32.756	24.801	7.2	245	2.9	200	233	40 56 01 N	69 9 01 W
201/0426	16.87	15.69	12.198	32.848	24.908	7.6	234	2.8	201	214	40 55 50 N	69 10 51 W
201/0441	16.93	15.76	12.187	32.856	24.916	10.5	235	1.6	172	200	40 54 56 N	69 10 59 W
201/0456	17.30	16.12	12.067	32.820	24.911	10.8	239	1.3	174	217	40 53 93 N	69 10 56 W
201/0511	17.41	16.21	12.075	32.754	24.858	8.9	231	3.0	167	147	40 52 81 N	69 10 41 W
201/0526	16.97	15.77	12.353	32.834	24.867	8.6	215	2.0	230	204	40 52 20 N	69 9 02 W
201/0542	17.18	15.97	12.160	32.788	24.868	5.5	232	2.3	246	252	40 52 28 N	69 10 43 W
201/0557	17.08	15.87	11.827	32.654	24.829	4.6	253	3.1	202	236	40 50 92 N	69 11 00 W
201/0612	16.80	15.58	11.737	32.564	24.726	6.7	243	2.4	194	198	40 49 73 N	69 11 20 W
201/0627	16.75	15.53	11.855	32.673	24.838	7.9	236	1.2	134	69	40 49 02 N	69 11 57 W
201/0642	16.14	15.93	12.011	32.853	24.948	7.3	232	1.8	294	20	40 48 94 N	69 11 60 W
201/0657	16.96	15.73	11.991	32.856	24.954	8.5	213	1.8	294	20	40 49 28 N	69 11 07 W
201/0712	16.72	15.48	12.039	32.856	24.945	8.5	209	1.7	301	116	40 49 49 N	69 11 37 W
201/0727	17.03	15.78	12.061	32.856	24.940	7.9	196	1.3	267	319	40 49 46 N	69 12 09 W
201/0742	17.35	16.07	11.747	32.856	25.801	8.3	198	1.1	281	333	40 49 55 N	69 12 20 W
201/0757	16.84	15.55	11.622	32.776	24.962	7.8	195	1.2	209	332	40 49 51 N	69 13 50 W
201/0812	16.89	15.61	11.528	32.413	24.700	7.8	195	1.1	273	332	40 49 81 N	69 14 27 W
201/0827	16.50	15.21	11.458	32.267	24.598	6.5	282	1.2	270	333	40 49 02 N	69 15 01 W
201/0842	15.73	14.42	11.373	32.235	24.588	6.8	75	1.2	277	333	40 49 88 N	69 15 29 W
201/0857	15.78	14.48	11.262	32.179	24.562	8.7	108	1.3	288	332	40 50 43 N	69 16 50 W
201/0912	16.57	15.30	11.156	32.145	24.559	9.0	46	1.4	298	332	40 50 31 N	69 17 30 W
201/0927	16.79	15.51	11.029	32.155	24.590	10.1	250	1.8	278	284	40 50 55 N	69 18 52 W
201/0942	16.62	15.33	11.014	32.220	24.644	9.1	282	1.8	255	256	40 50 38 N	69 19 49 W
201/0957	16.27	14.97	11.143	32.354	24.724	8.7	261	1.1	278	126	40 50 25 N	69 20 33 W
201/1012	15.73	14.43	11.179	32.392	24.747	8.8	357	1.6	285	103	40 50 38 N	69 20 06 W
201/1027	15.91	14.61	11.212	32.410	24.754	9.8	172	1.3	149	114	40 50 33 N	69 20 01 W
201/1042	16.28	14.97	11.258	32.397	24.736	9.5	168	1.3	127	114	40 50 21 N	69 20 65 W
201/1057	16.12	14.79	11.340	32.428	24.745	9.1	167	1.4	118	114	40 50 13 N	69 20 41 W
201/1112	16.50	15.10	11.362	32.436	24.747	10.3	168	1.5	86	114	40 50 11 N	69 20 08 W
201/1128	16.67	15.34	11.322	32.332	24.674	10.1	44	1.8	64	103	40 50 22 N	69 19 20 W
201/1143	16.84	15.51	11.332	32.238	24.599	10.4	315	1.9	101	124	40 50 59 N	69 19 47 W
201/1158	16.92	15.57	11.334	32.314	24.657	9.1	187	1.1	94	101	40 50 74 N	69 19 10 W
201/1213	16.77	15.42	11.310	32.287	24.641	9.2	200	1.1	86	181	40 50 74 N	69 19 33 W
201/1228	16.56	15.19	11.342	32.371	24.781	7.6	188	1.2	100	163	40 50 72 N	69 19 19 W
201/1243	16.62	15.25	11.419	32.320	24.701	9.3	204	1.5	240	247	40 50 82 N	69 19 19 W
201/1258	16.67	15.28	11.471	32.379	24.682	11.0	271	1.9	342	278	40 51 14 N	69 19 36 W
201/1313	16.85	15.45	11.531	32.528	24.787	10.3	221	1.6	239	298	40 51 69 N	69 19 76 W
201/1328	17.52	16.11	11.526	32.496	24.763	10.9	192	2.4	211	249	40 52 75 N	69 19 30 W
201/1343	17.29	15.81	11.403	32.470	24.781	10.8	267	3.0	33	44	40 53 98 N	69 19 00 W
201/1358	16.43	14.84	11.254	32.467	24.791	11.0	193	2.9	55	79	40 54 97 N	69 17 14 W
201/1413	16.53	14.97	11.309	32.457	24.758	10.3	50	2.4	79	185	40 55 40 N	69 16 22 W
201/1428	17.08	15.53	11.555	32.718	24.930	10.2	31	1.8	181	142	40 55 40 N	69 14 92 W
201/1443	17.24	15.71	11.629	32.856	25.023	9.0	249	1.0	53	188	40 55 50 N	69 14 34 W

15 MINUTE AVERAGES: DATA

DTG, Z	TA degC	TDP degC	TS degC	SAL ppt	SIGT g/cm ³	WS m/sec	WD deg	SHIPS m/sec	CSF deg	HOG deg	LAI deg	LOBC deg
201/1450	17.04	15.50	11.685	32.850	25.015	10.4	237	1.2	37	104	40 55.98 N	69 13.08 W
201/1513	16.55	15.00	11.713	32.830	24.907	10.1	241	1.2	36	98	40 56.47 N	69 13.39 W
201/1520	16.12	14.57	11.562	32.050	25.031	10.0	130	1.1	40	99	40 56.92 N	69 12.96 W
201/1543	16.74	15.23	11.499	32.834	25.031	10.0	05	1.0	05	141	40 57.16 N	69 12.46 W
201/1550	17.10	15.60	11.546	32.757	24.962	9.0	339	2.0	279	250	40 57.42 N	69 12.39 W
201/1613	16.24	14.67	11.369	32.541	24.877	0.7	220	2.8	333	311	40 58.71 N	69 13.13 W
201/1620	16.26	14.69	11.400	32.255	24.599	0.8	259	1.0	239	265	40 59.30 N	69 13.63 W
201/1643	16.25	14.68	11.501	32.230	24.567	0.2	359	6	177	208	40 59.23 N	69 13.36 W
201/1650	16.67	15.12	11.559	32.220	24.542	9.1	246	6	139	204	40 59.06 N	69 13.05 W
201/1713	17.45	15.92	11.567	32.216	24.530	0.5	238	1.2	159	250	40 50.74 N	69 12.01 W
201/1720	17.57	16.05	11.417	32.254	24.595	0.5	214	2.6	200	239	40 52.64 N	69 13.70 W
201/1744	17.00	15.49	11.660	32.245	24.542	0.5	209	2.4	200	239	40 56.53 N	69 13.03 W
201/1759	16.55	15.04	11.774	32.126	24.429	0.6	206	2.5	201	246	40 55.30 N	69 14.34 W
201/1814	16.76	15.20	11.779	32.134	24.434	0.6	204	2.5	206	247	40 54.26 N	69 15.06 W
201/1829	16.94	15.48	11.723	32.107	24.424	0.2	206	2.5	210	254	40 53.18 N	69 15.01 W
201/1844	16.64	15.16	11.730	32.114	24.426	7.7	202	2.6	218	255	40 52.15 N	69 16.02 W
201/1914	16.77	15.31	11.808	32.133	24.413	7.0	206	1.6	219	254	40 50.46 N	69 10.61 W
201/1929	16.90	15.47	11.800	32.207	24.406	7.5	208	1.5	222	254	40 49.88 N	69 19.26 W
201/1944	17.29	15.90	11.755	32.264	24.539	0.1	204	1.4	255	249	40 49.51 N	69 20.00 W
201/1959	16.69	15.29	11.732	32.281	24.557	0.9	204	6	130	69	40 49.72 N	69 20.37 W
201/2014	16.51	15.11	11.742	32.324	24.588	0.1	204	6	24	67	40 49.98 N	69 20.20 W
201/2029	16.61	15.23	11.572	32.305	24.606	0.3	194	7	57	77	40 50.23 N	69 19.50 W
201/2044	16.05	14.64	11.424	32.329	24.652	0.2	204	7	93	01	40 50.21 N	69 19.57 W
201/2059	16.67	15.29	11.445	32.304	24.629	0.4	197	7	90	01	40 50.19 N	69 19.11 W
201/2114	16.40	15.02	11.431	32.274	24.608	0.3	196	8	103	00	40 50.10 N	69 18.67 W
201/2129	16.91	15.57	11.443	32.213	24.580	0.0	230	1.8	200	244	40 49.74 N	69 18.77 W
201/2144	17.26	15.94	11.445	32.320	24.641	7.8	251	1.7	260	203	40 49.68 N	69 19.00 W
201/2159	15.90	14.55	11.425	32.318	24.644	0.1	191	1.2	47	82	40 49.90 N	69 19.90 W
201/2214	16.37	15.07	11.425	32.283	24.616	9.2	260	1.0	162	140	***	***
201/2229	16.09	15.62	11.409	32.343	24.666	0.3	232	1.1	167	176	***	***
201/2244	17.32	16.07	11.446	32.308	24.631	7.9	221	1.0	129	104	40 49.97 N	69 20.74 W
201/2259	17.28	16.07	11.441	32.207	24.617	7.7	217	6	211	171	40 50.07 N	69 20.76 W
201/2314	16.99	15.77	11.429	32.267	24.603	6.0	211	5	328	114	40 50.23 N	69 20.93 W
201/2329	16.91	15.70	11.424	32.251	24.591	6.0	211	7	197	113	40 50.53 N	69 20.96 W
201/2344	16.00	14.75	11.274	32.278	24.641	4.5	257	2.9	40	113	40 51.50 N	69 20.64 W
201/2359	15.58	14.31	11.173	32.294	24.672	4.3	240	3.1	22	50	40 52.90 N	69 19.97 W
202/0014	16.13	14.07	11.073	32.262	24.665	4.4	245	3.2	27	55	40 54.30 N	69 19.04 W
202/0029	15.11	13.79	11.158	32.202	24.603	3.9	222	4.0	38	64	40 55.78 N	69 17.67 W
202/0045	15.83	14.51	11.102	32.209	24.619	4.4	217	4.1	35	93	40 57.37 N	69 16.06 W
202/0100	16.13	14.70	11.070	32.224	24.636	5.3	210	2.8	316	207	40 50.74 N	69 16.23 W
202/0115	16.00	14.63	11.196	32.065	24.490	4.5	209	2.0	317	279	40 59.57 N	69 17.08 W
202/0130	17.45	16.08	11.206	32.054	24.479	3.1	214	2.5	293	269	41	69 18.32 W
202/0145	17.46	16.07	10.694	32.005	24.596	2.6	251	1.5	221	236	41	69 19.40 W
202/0200	15.86	14.46	10.958	32.050	24.521	3.1	244	3.3	76	91	41	69 18.70 W
202/0215	16.22	14.82	11.398	31.836	24.274	3.4	257	3.0	115	135	41	69 16.37 W
202/0230	16.99	15.58	11.335	31.839	24.288	2.4	272	2.8	152	161	40 59.75 N	69 15.30 W
202/0245	17.07	15.67	11.463	32.148	24.584	2.3	00	2.5	153	152	40 50.62 N	69 14.63 W

15 MINUTE AVERAGES: DATA

DATE, Z	TA degC	TDP degC	TS degC	SAL ppt	STGT g/cm ³	WS m/sec	WD deg	SUAPS m/sec	CSF deg	DGG deg	LA) deg mins	U00G deg mins
202/0300	17.53	16.09	11.343	32.452	24.767	2.1	60	2.5	156	163	40 52 54 N	69 13 42 W
202/0315	16.93	15.40	11.525	32.650	24.809	1.5	22	2.5	179	194	40 56 35 N	69 13 44 W
202/0330	17.04	15.59	11.760	32.811	24.963	2.3	271	2.7	186	208	40 55 07 N	69 13 66 W
202/0345	16.66	17.15	11.724	32.823	24.979	1.7	270	2.0	180	216	40 53 25 N	69 13 97 W
202/0400	19.02	17.49	11.743	32.771	24.935	1.3	27	3.3	139	121	40 52 50 N	69 13 75 W
202/0415	19.76	18.20	11.768	32.833	24.975	1.4	317	2.2	127	93	40 51 72 N	69 11 02 W
202/0430	19.01	18.27	11.831	32.856	24.985	1.1	230	1.3	62	90	40 52 01 N	69 11 35 W
202/0445	19.51	17.99	11.819	32.861	24.991	.9	25	1.0	212	258	40 51 71 N	69 11 15 W
202/0500	19.96	18.44	11.817	32.792	24.930	1.1	10	1.3	196	223	40 51 28 N	69 11 02 W
202/0515	20.14	18.62	11.913	32.754	24.890	1.1	360	1.1	190	252	40 50 63 N	69 11 46 W
202/0530	18.30	16.04	11.843	32.760	24.914	3.2	343	.6	166	307	40 50 37 N	69 11 60 W
202/0545	16.08	14.67	11.744	32.771	24.935	5.7	344	.6	303	303	40 50 16 N	69 11 76 W
202/0600	14.41	12.96	11.620	32.610	24.834	5.3	349	.7	255	307	40 50 06 N	69 12 17 W
202/0615	14.79	13.35	11.433	32.437	24.734	5.0	346	.9	246	307	40 49 09 N	69 12 70 W
202/0630	15.32	13.89	11.414	32.390	24.701	5.0	355	1.1	243	307	40 49 66 N	69 13 42 W
202/0645	14.84	13.39	11.277	32.322	24.674	6.0	12	1.0	272	208	40 49 53 N	69 14 04 W
202/0700	14.99	13.55	11.344	32.404	24.726	5.7	24	.3	119	103	40 49 61 N	69 14 10 W
202/0715	14.93	13.49	11.326	32.310	24.662	6.4	4	2.0	276	307	40 49 74 N	69 14 92 W
202/0730	14.30	12.84	11.291	32.254	24.619	5.8	17	1.4	207	122	40 49 72 N	69 16 15 W
202/0745	14.44	12.99	11.295	32.262	24.624	5.4	29	.2	209	43	40 49 05 N	69 16 35 W
202/0800	14.40	12.95	11.300	32.241	24.607	5.0	28	.4	220	42	40 49 01 N	69 16 17 W
202/0815	13.89	12.43	11.332	32.212	24.579	4.1	32	.4	228	43	40 49 66 N	69 16 66 W
202/0830	13.87	12.41	11.305	32.136	24.524	4.5	30	.3	226	43	40 49 55 N	69 16 04 W
202/0845	13.87	12.41	11.217	32.125	24.532	5.4	62	.3	255	43	40 49 47 N	69 17 04 W
202/0901	14.21	12.75	11.104	32.092	24.527	4.6	49	.2	200	43	40 49 40 N	69 17 20 W
202/0916	14.21	12.75	11.072	32.108	24.546	4.5	44	.3	299	43	40 49 54 N	69 17 37 W
202/0931	13.86	12.90	11.074	32.160	24.595	7.0	8	1.0	265	237	40 49 60 N	69 18 00 W
202/0946	13.80	12.45	11.115	32.424	24.784	7.3	3	2.1	282	299	40 49 92 N	69 19 46 W
202/1001	12.68	11.43	11.120	32.447	24.800	7.8	326	.9	248	207	40 49 84 N	69 20 14 W
202/1016	13.25	11.80	11.124	32.449	24.801	9.5	347	.8	242	222	40 49 64 N	69 20 64 W
202/1031	13.08	11.63	11.139	32.450	24.799	9.9	354	.7	243	239	40 49 40 N	69 21 05 W
202/1046	12.98	11.52	11.147	32.453	24.800	9.8	4	.5	240	244	40 49 37 N	69 21 39 W
202/1101	13.12	11.66	11.167	32.464	24.805	10.4	8	.2	252	252	40 49 31 N	69 21 59 W
202/1116	13.53	12.07	11.189	32.475	24.809	10.3	14	.2	256	264	40 49 28 N	69 21 74 W
202/1131	13.42	11.95	11.204	32.475	24.807	8.9	21	.1	304	260	40 49 30 N	69 21 103 W
202/1146	13.60	12.13	11.303	32.468	24.783	9.1	349	2.3	287	276	40 49 50 N	69 22 69 W
202/1201	12.86	11.30	11.384	32.346	24.673	10.2	341	2.7	292	275	40 49 94 N	69 24 57 W
202/1216	13.01	11.52	11.540	32.295	24.604	10.2	352	2.6	265	265	40 50 23 N	69 26 02 W
202/1231	13.04	11.55	11.740	32.311	24.579	9.6	357	2.6	267	262	40 50 28 N	69 27 40 W
202/1246	13.25	11.76	11.770	32.403	24.645	9.8	360	2.6	268	262	40 50 16 N	69 29 36 W
202/1301	13.35	11.86	11.783	32.467	24.691	10.1	359	2.5	269	263	40 50 12 N	69 30 59 W
202/1316	13.40	11.90	11.818	32.503	24.713	10.3	1	2.4	269	262	40 50 11 N	69 32 09 W
202/1331	13.60	12.16	11.954	32.537	24.713	10.9	6	2.3	262	263	40 49 99 N	69 34 11 W
202/1346	13.91	12.34	12.032	32.542	24.702	11.4	6	1.6	92	349	40 50 37 N	69 34 66 W
202/1402	13.88	12.21	12.026	32.542	24.703	10.3	14	1.4	37	133	40 50 98 N	69 34 74 W
202/1417	13.75	12.01	12.008	32.542	24.707	10.0	13	1.7	52	68	40 51 49 N	69 33 42 W
202/1432	13.59	11.83	11.977	32.542	24.713	10.6	5	1.9	72	91	40 51 86 N	69 32 35 W
202/1447	13.67	11.90	11.887	32.537	24.726	11.1	344	1.9	105	123	40 51 83 N	69 31 19 W

15 MINUTE AVERAGES DATA

DTG,Z	TA degF	TDP degC	TS degC	SAL ppt	SIGT g/cm ³	WS m/sec	WD deg	SHIPS m/sec	ESR deg	HOB deg	LAT deg min	LONG deg min
202/1502	13.68	11.92	11.791	32.530	24.739	9.5	350	1.6	143	168	40 51.36 N	69 30 23 W
202/1517	13.70	11.95	11.793	32.533	24.743	10.2	360	1.8	146	241	40 50.82 N	69 30 09 W
202/1532	13.66	11.92	11.652	32.535	24.731	10.4	346	6	265	272	40 50.65 N	69 30 59 W
202/1547	13.87	12.15	11.966	32.535	24.709	10.4	330	6	323	266	40 50.05 N	69 30 62 W
202/1602	14.07	12.36	12.025	32.535	24.698	11.1	345	5	224	264	40 51.02 N	69 30 25 W
202/1617	14.09	12.38	12.045	32.531	24.692	12.3	352	6	143	270	40 50.05 N	69 30 50 W
202/1632	13.96	12.25	12.042	32.525	24.697	12.3	346	5	161	275	40 50.58 N	69 30 33 W
202/1647	13.92	12.21	12.052	32.515	24.678	12.5	352	6	170	270	40 50.38 N	69 30 25 W
202/1702	*****	*****	12.056	32.508	24.671	12.5	354	9	153	268	40 49.92 N	69 30 01 W
202/1717	*****	*****	12.073	32.494	24.657	12.2	344	1.3	239	275	40 49.57 N	69 30 22 W
202/1732	*****	*****	12.132	32.452	24.613	12.1	344	1.6	268	201	40 49.51 N	69 31 25 W
202/1747	*****	*****	12.165	32.379	24.550	11.7	346	1.7	266	202	40 49.46 N	69 32 35 W
202/1802	*****	*****	12.187	32.326	24.505	10.5	340	1.5	242	278	40 49.26 N	69 33 30 W
202/1817	*****	*****	12.183	32.303	24.408	10.4	352	1.4	225	271	40 48.80 N	69 34 04 W
202/1832	*****	*****	12.141	32.312	24.503	10.2	368	2.0	192	168	40 47.89 N	69 34 95 W
202/1847	14.60	12.65	11.978	32.445	24.638	10.3	351	5.6	175	171	40 45.55 N	69 34 27 W
202/1902	14.74	12.38	12.085	32.632	24.777	10.7	350	5.9	175	174	40 42.69 N	69 33 00 W
202/1917	14.85	12.09	12.067	32.659	24.786	10.3	353	5.3	175	174	40 39.92 N	69 33 14 W
202/1932	14.96	11.73	11.996	32.606	24.021	9.8	354	5.0	177	175	40 37.52 N	69 33 33 W
202/1947	14.68	11.01	12.093	32.914	24.979	9.5	350	5.0	179	174	40 34.86 N	69 33 23 W
202/2002	14.57	10.60	13.100	33.266	25.053	9.1	344	6.5	167	156	40 31.86 N	69 32 17 W
202/2017	14.76	10.60	14.632	33.341	24.791	9.5	347	6.7	179	176	40 28.61 N	69 32 37 W
202/2032	15.25	11.01	15.311	33.506	24.720	10.0	347	6.4	177	171	40 25.52 N	69 32 04 W
202/2048	15.94	11.69	18.727	33.579	24.820	12.3	354	7.2	178	173	40 22.14 N	69 31 03 W
202/2103	16.44	12.17	18.837	33.673	24.864	12.6	350	7.1	179	174	40 18.64 N	69 31 23 W
202/2118	16.53	12.17	18.632	33.656	24.103	12.9	354	7.0	170	173	40 15.21 N	69 31 61 W
202/2133	16.82	12.46	20.199	33.785	23.799	11.0	353	5.3	168	173	***	***
202/2148	17.04	12.62	20.229	33.845	23.837	12.5	348	6.8	179	174	40 8.42 N	69 31 37 W
202/2203	16.98	12.49	19.868	33.809	23.905	12.5	344	7.0	170	174	40 5.00 N	69 31 10 W
202/2218	17.01	12.50	19.616	33.806	23.968	12.8	342	7.2	177	174	40 1.53 N	69 30 20 W
202/2233	16.93	12.49	19.726	33.798	23.927	13.1	342	7.0	170	174	39 58.08 N	69 30 20 W
202/2248	17.13	12.71	21.286	34.102	23.750	13.7	343	7.0	176	174	39 54.67 N	69 30 50 W
202/2303	17.43	12.96	22.404	34.680	23.879	13.7	343	7.1	176	172	39 51.24 N	69 30 00 W
202/2318	17.70	13.30	23.136	35.004	23.915	13.7	344	7.1	172	168	39 47.81 N	69 29 47 W
202/2333	17.96	13.49	23.239	35.062	23.944	13.7	347	7.1	173	169	39 44.35 N	69 28 21 W
202/2348	18.20	13.61	23.308	35.110	23.945	13.6	343	7.0	173	169	39 40.93 N	69 28 35 W
203/0003	18.43	13.71	23.727	35.179	23.875	13.2	342	7.0	174	169	39 37.54 N	69 27 00 W
203/0018	18.65	13.84	23.925	35.117	23.769	12.9	339	7.0	175	169	39 34.16 N	69 27 30 W
203/0033	18.84	13.94	23.819	35.189	23.852	12.5	334	6.9	175	169	39 30.79 N	69 26 05 W
203/0048	18.90	13.98	22.509	34.647	23.824	12.5	332	6.9	174	170	39 27.46 N	69 26 44 W
203/0103	19.12	14.05	23.437	35.025	23.844	12.3	335	6.7	176	170	39 24.15 N	69 26 29 W
203/0118	19.40	14.25	24.329	34.891	23.478	12.9	337	6.7	173	170	39 20.90 N	69 25 49 W
203/0133	19.59	14.38	24.144	34.674	23.370	12.6	337	6.7	175	170	39 17.62 N	69 25 06 W
203/0148	19.75	14.51	24.646	35.066	23.515	11.4	339	5.6	173	170	***	***
203/0203	20.02	14.74	24.982	35.261	23.561	12.1	334	6.7	172	170	39 11.05 N	69 24 10 W
203/0218	20.24	14.89	24.664	34.955	23.426	12.9	337	6.8	173	174	39 7.75 N	69 23 65 W
203/0233	20.38	14.94	25.067	34.952	23.301	13.1	337	6.8	174	174	39 4.46 N	69 23 10 W
203/0248	20.56	15.11	25.250	34.999	23.280	11.7	333	6.9	175	174	39 1.13 N	69 22 24 W

15 MINUTE AVERAGES: DATA

DTG,Z	TA	TOP	TS	SAL	SIGT	WS	WD	SWIFS	CSE	HOB	LAT	LONG
	degC	degE	degE	ppt	m/xxxx	m/sec	deg	m/sec	deg	deg	deg	deg
203/0303	20.60	15.10	25.335	35.171	23.304	11.9	327	6.9	175	174	30 57.75 N	69 22.30 W
203/0310	20.81	15.29	25.248	35.064	23.330	11.1	324	6.9	174	174	30 54.38 N	69 21.87 W
203/0318	20.06	15.39	25.610	35.076	23.225	10.0	327	6.8	175	177	30 46.70 N	69 20.78 W
203/0403	21.15	15.56	26.021	35.291	23.261	10.0	324	6.8	179	180	30 43.46 N	69 20.73 W
203/0408	21.28	15.64	25.982	35.081	23.115	10.7	326	6.7	176	180	30 40.17 N	69 20.90 W
203/0438	21.47	15.70	26.722	35.295	23.042	11.1	322	6.7	174	184	30 36.90 N	69 20.00 W
203/0453	21.64	15.87	26.553	35.174	23.005	11.5	320	6.3	180	198	30 33.76 N	69 20.37 W
203/0508	21.62	15.90	25.790	34.666	22.862	10.8	328	3.2	175	205	30 31.69 N	69 20.42 W
203/0523	21.57	15.96	26.154	34.986	22.990	10.2	327	1.5	137	264	30 30.78 N	69 20.55 W
203/0538	21.60	16.06	26.240	35.093	23.043	10.2	325	1.7	139	277	30 30.90 N	69 20.07 W
203/0553	21.72	16.16	26.303	35.126	23.048	10.2	331	1.6	96	283	30 30.00 N	69 19.50 W
203/0608	21.87	16.31	26.344	35.144	23.048	11.0	331	1.6	97	276	30 30.77 N	69 18.26 W
203/0623	21.97	16.42	26.346	35.149	23.051	9.5	345	1.3	74	190	30 30.05 N	69 17.44 W
203/0638	22.04	16.43	26.334	35.145	23.052	8.7	352	1.5	02	152	30 30.95 N	69 16.56 W
203/0653	21.75	16.14	26.352	35.154	23.053	7.4	334	1.0	93	273	30 30.97 N	69 15.11 W
203/0708	21.74	16.01	26.367	35.186	23.073	7.2	332	1.9	100	268	30 30.92 N	69 15.23 W
203/0723	21.77	16.06	26.459	35.262	23.101	6.6	322	1.8	106	257	30 30.03 N	69 14.76 W
203/0738	21.83	16.10	26.570	35.353	23.134	5.8	325	1.7	104	264	30 30.73 N	69 14.28 W
203/0753	21.88	16.26	26.821	35.490	23.156	6.4	311	1.8	102	260	30 30.66 N	69 13.79 W
203/0808	21.81	16.18	27.024	35.652	23.191	6.6	304	1.1	91	275	30 30.61 N	69 13.14 W
203/0823	21.80	16.31	27.206	35.679	23.174	7.0	304	1.8	106	258	30 30.55 N	69 12.55 W
203/0838	21.92	16.35	27.225	35.683	23.170	7.0	303	1.9	100	260	30 30.42 N	69 12.04 W
203/0853	22.00	16.40	27.304	35.726	23.177	7.7	305	1.9	107	265	30 30.30 N	69 11.50 W
203/0908	21.95	16.17	27.335	35.764	23.196	6.7	307	1.8	80	275	30 30.23 N	69 10.95 W
203/0923	21.99	16.22	27.345	35.781	23.205	5.7	304	1.6	68	281	30 30.32 N	69 10.50 W
203/0938	22.00	16.34	27.380	35.789	23.208	5.8	276	1.5	80	271	30 30.39 N	69 10.76 W
203/1323	23.02	17.44	27.606	35.657	23.027	6.1	266	3.7	269	270	30 29.91 N	69 16.46 W
203/1338	24.02	17.69	27.582	35.609	22.999	6.1	266	3.2	269	270	30 29.99 N	69 18.63 W
203/1353	23.95	17.69	27.612	35.599	22.981	6.2	263	2.0	277	270	30 30.09 N	69 20.16 W
203/1408	23.85	17.63	27.643	35.608	22.978	6.4	265	1.4	281	261	30 30.22 N	69 21.07 W
203/1423	24.22	18.06	27.630	35.602	22.978	9.7	263	4.2	89	119	30 30.56 N	69 19.61 W
203/1438	24.13	17.86	27.619	35.597	22.978	8.4	267	1.7	162	267	30 30.79 N	69 18.51 W
203/1453	24.00	17.83	27.590	35.587	22.986	10.2	271	1.5	65	297	30 31.20 N	69 18.47 W
203/1508	24.17	17.86	27.364	35.498	22.986	10.2	271	3.1	39	30	30 32.25 N	69 17.62 W
203/1523	24.87	18.20	27.260	35.504	23.025	10.5	270	4.3	66	70	30 33.33 N	69 15.67 W
203/1538	25.30	18.21	27.092	35.506	23.081	11.0	246	4.6	90	97	30 33.76 N	69 12.95 W
203/1553	24.92	17.46	27.255	35.520	23.039	10.8	237	4.1	126	139	30 33.17 N	69 11.40 W
203/1608	24.72	16.92	27.387	35.494	22.976	12.9	264	2.7	147	219	30 32.14 N	69 8.89 W
203/1623	24.87	16.93	27.583	35.576	22.973	11.8	269	2.0	136	250	30 31.44 N	69 8.13 W
203/1638	24.95	16.79	27.692	35.706	23.035	8.2	248	2.7	240	266	30 30.82 N	69 0.79 W
203/1653	24.99	16.92	27.600	35.702	23.063	7.7	244	4.2	250	265	30 30.28 N	69 11.06 W
203/1708	*****	*****	27.597	35.823	23.154	8.4	243	4.2	264	270	30 29.94 N	69 13.62 W
203/1723	*****	*****	27.697	35.869	23.157	8.9	240	4.3	267	270	30 29.90 N	69 16.26 W
203/1738	*****	*****	27.811	35.830	23.089	9.8	239	4.0	271	267	30 29.89 N	69 10.05 W
203/1753	*****	*****	27.869	35.802	23.049	11.7	230	2.9	133	133	30 29.40 N	69 10.70 W
203/1808	*****	*****	27.858	35.802	23.052	12.3	230	2.7	104	133	30 29.88 N	69 17.08 W
203/1823	*****	*****	27.815	35.813	23.075	*****	***	2.6	89	198	30 28.07 N	69 15.44 W
203/1838	25.10	18.56	27.813	35.807	23.072	13.2	241	1.6	72	271	30 29.25 N	69 14.30 W

15 MINUTE AVERAGES DATA

DIC, Z	TA degC	TDP degC	TS degC	SAL ppt	SIGT g/cm ³	WS m/sec	WD deg	SHIPS m/sec	CSF deg	HDS deg	LAI deg mins	1000Z deg mins
203/1053	25.13	18.07	27.015	35.024	23.003	13.5	242	3.6	125	151	30 20 67 N	69 13 02 W
203/1208	25.43	19.12	27.005	35.067	23.119	14.8	253	4.6	77	110	30 20 59 N	69 10 20 W
203/1973	25.26	19.79	27.004	35.064	23.117	12.0	250	1.3	155	269	30 20 00 N	69 9 50 W
203/1938	25.20	18.02	27.029	35.080	23.067	10.8	251	2.1	264	270	30 20 99 N	69 10 51 W
203/1953	25.10	18.00	27.021	35.091	23.074	0.9	261	2.1	265	270	30 20 09 N	69 11 03 W
203/2008	25.14	18.05	27.031	35.065	23.081	8.9	259	2.1	162	270	30 20 82 N	69 13 10 W
203/2023	25.19	19.73	27.015	35.080	22.964	10.4	266	1.2	162	270	30 20 00 N	69 14 05 W
203/2038	25.10	18.72	27.098	35.096	22.964	11.7	264	1.3	160	266	30 20 75 N	69 13 22 W
203/2053	25.21	18.78	27.093	35.085	22.954	11.7	266	1.4	237	266	30 20 66 N	69 14 00 W
203/2108	25.17	18.64	27.094	35.099	22.964	13.3	260	4	232	265	30 20 55 N	69 14 27 W
203/2123	25.19	18.58	27.084	35.077	22.995	12.3	265	1.3	232	266	30 20 44 N	69 14 45 W
203/2138	25.27	18.49	27.013	35.083	23.028	12.1	265	1.3	231	265	30 20 34 N	69 14 53 W
203/2153	25.31	18.58	27.070	35.011	23.022	11.7	264	7	183	275	30 20 26 N	69 14 40 W
203/2208	25.32	18.56	27.068	35.004	23.017	12.7	264	6	137	266	30 20 30 N	69 14 19 W
203/2223	25.45	19.49	27.061	35.087	23.008	12.7	269	1	177	265	30 20 24 N	69 14 10 W
203/2238	25.15	18.23	27.050	35.080	23.003	12.1	267	1	211	265	30 20 18 N	69 14 28 W
203/2253	25.05	18.08	27.063	35.032	23.033	13.0	267	1	193	265	30 20 14 N	69 14 22 W
203/2322	25.15	18.35	27.059	35.047	23.054	13.0	278	1	102	265	30 20 05 N	69 14 29 W
203/2337	25.06	18.46	27.043	35.043	23.055	15.8	280	1.3	223	266	30 20 99 N	69 14 46 W
203/2352	24.98	18.36	27.050	35.037	23.049	16.1	281	1.3	237	265	30 20 98 N	69 14 52 W
204/0007	24.94	19.37	27.046	35.039	23.044	15.8	282	1.3	240	265	30 20 81 N	69 14 57 W
204/0022	24.95	18.45	27.046	35.003	23.025	15.4	284	1.3	236	267	30 20 72 N	69 14 06 W
204/0037	24.90	18.18	27.049	35.073	23.081	15.0	286	1.3	230	266	30 20 64 N	69 15 03 W
204/0052	24.88	18.19	27.068	35.020	23.033	15.0	207	5	251	266	30 20 56 N	69 15 20 W
204/0107	24.83	18.16	27.054	35.032	23.043	14.0	281	5	253	265	30 20 49 N	69 15 37 W
204/0122	24.83	18.32	27.042	35.035	23.050	12.9	279	5	254	266	30 20 42 N	69 15 07 W
204/0137	24.81	18.29	27.012	35.057	23.076	12.0	277	6	257	266	30 20 36 N	69 16 10 W
204/0152	24.91	18.22	27.028	35.093	23.097	12.1	277	7	262	266	30 20 32 N	69 16 21 W
204/0207	24.90	18.22	27.075	36.000	23.162	11.1	275	8	271	266	30 20 28 N	69 17 19 W
204/0222	24.98	18.17	27.054	36.045	23.204	11.8	273	8	271	266	30 20 20 N	69 17 08 W
204/0237	25.03	18.17	27.041	36.044	23.207	11.4	275	8	273	266	30 20 30 N	69 18 17 W
204/0252	25.11	18.14	27.050	36.032	23.192	7.7	269	7	299	274	30 20 39 N	69 18 64 W
204/0307	25.14	18.07	27.077	36.030	23.185	7.3	267	5	332	275	30 20 61 N	69 18 03 W
204/0322	25.22	18.17	27.081	36.030	23.183	6.7	264	5	333	276	30 20 83 N	69 18 09 W
204/0337	25.24	18.14	27.009	36.030	23.180	7.4	263	5	339	275	30 20 84 N	69 19 10 W
204/0352	25.27	18.22	27.093	36.016	23.168	7.2	258	5	339	275	30 20 27 N	69 19 22 W
204/0407	25.27	18.31	27.079	35.981	23.147	6.9	259	5	336	276	30 20 51 N	69 19 35 W
204/0422	25.25	18.39	27.079	35.968	23.137	7.9	256	1.8	189	276	30 20 76 N	69 19 23 W
204/0437	25.25	18.42	27.085	35.969	23.136	8.2	256	1.8	60	275	30 20 02 N	69 18 67 W
204/0452	25.26	18.41	27.085	35.967	23.135	8.4	254	1.8	58	274	30 20 28 N	69 18 14 W
204/0507	25.26	18.71	27.093	35.970	23.134	7.0	257	4	78	268	30 20 08 N	69 17 52 W
204/0522	25.24	18.83	27.099	35.998	23.147	11.3	261	6	194	243	30 20 47 N	69 17 97 W
204/0537	25.23	18.84	27.080	35.994	23.157	11.6	262	8	210	246	30 20 17 N	69 18 14 W
204/0552	25.21	19.00	27.059	35.966	23.142	9.3	263	7	263	263	30 20 98 N	69 18 49 W
204/0607	25.21	19.14	27.051	35.960	23.141	7.3	257	7	306	271	30 20 16 N	69 18 08 W
204/0622	25.19	19.08	27.071	35.953	23.129	7.4	261	7	305	270	30 20 30 N	69 19 27 W
204/0637	25.23	18.99	28.013	35.967	23.125	9.3	261	7	290	260	30 20 56 N	69 19 66 W
204/0652	25.30	19.04	28.009	35.973	23.131	13.2	265	6	285	244	30 20 38 N	69 19 00 W

15 MINUTE AVERAGES: DATA

IDB, Z	TA degC	TDP degC	T5 degC	SAL ppt	SIBT q/cm**3	WS m/sec	WB deg	SWAPS m/sec	TSE deg	HDS deg	LAT		1100Z mins						
											deg	mins							
2044/0708	25.34	19.18	27.012	35.903	23.138	10.1	262	5	245	261	30	29	26	N	69	20	11	0	
2044/0723	25.37	19.27	27.020	35.990	23.140	9.7	263	2	295	260	30	29	30	N	69	20	14	0	
2044/0740	25.33	19.25	27.020	35.905	23.136	10.4	265	3	274	269	30	29	31	N	69	20	18	0	
2044/0753	25.31	19.43	27.005	35.955	23.126	7.4	262	4	310	264	30	29	69	N	69	20	11	0	
2044/0800	25.26	19.53	27.062	35.939	23.115	7.9	263	4	199	270	30	29	0	N	69	20	13	0	
2044/0823	25.33	19.56	27.081	35.928	23.107	7.9	262	4	130	276	30	30	13	N	69	20	13	0	
2044/0840	25.30	19.64	27.079	35.927	23.106	8.4	261	5	102	270	30	30	32	N	69	20	13	0	
2044/0853	25.20	19.66	27.080	35.926	23.103	8.5	263	5	131	270	30	30	63	N	69	20	09	0	
2044/0900	25.30	19.71	27.091	35.922	23.099	10.5	262	4	22	263	30	30	06	N	69	20	05	0	
2044/0923	25.46	19.02	27.097	35.927	23.101	12.6	263	3	156	264	30	30	91	N	69	19	02	0	
2044/0938	25.44	19.76	27.086	35.922	23.100	13.9	263	1	110	261	30	30	09	N	69	19	02	0	
2044/0953	25.44	19.04	27.090	35.910	23.093	13.7	263	2	122	262	30	30	05	N	69	19	01	0	
2044/1008	25.45	19.96	27.062	35.878	23.075	14.6	270	2	102	261	30	30	02	N	69	19	73	0	
2044/1023	25.41	20.12	27.060	35.893	23.084	14.2	269	2	101	262	30	30	29	N	69	19	60	0	
2044/1040	25.46	20.20	27.060	35.912	23.089	13.9	268	2	95	261	30	30	29	N	69	19	36	0	
2044/1053	25.59	20.33	27.061	35.906	23.097	13.6	273	3	110	243	30	30	26	N	69	19	36	0	
2044/1100	25.75	20.48	27.050	35.903	23.098	11.3	270	2	191	247	30	30	57	N	69	19	10	0	
2044/1123	25.92	20.65	27.033	35.874	23.097	8.1	265	18	303	269	30	30	71	N	69	19	40	0	
2044/1130	25.00	20.62	27.022	35.908	23.112	12.8	268	6	224	242	30	30	63	N	69	19	71	0	
2044/1140	25.79	20.60	27.015	35.939	23.137	12.0	270	2	209	241	30	30	40	N	69	19	07	0	
2044/1200	26.11	20.05	27.009	35.963	23.157	12.3	270	2	210	241	30	30	10	N	69	20	14	0	
2044/1223	26.16	20.09	27.004	35.980	23.171	11.5	268	3	175	241	30	29	07	N	69	20	14	0	
2044/1230	26.49	21.16	27.000	35.993	23.179	11.5	260	3	164	241	30	29	26	N	69	20	10	0	
2044/1253	26.59	21.25	27.004	35.994	23.182	11.2	270	2	164	240	30	29	63	N	69	20	03	0	
2044/1300	26.67	21.31	27.003	36.000	23.186	10.5	268	3	167	240	30	29	50	N	69	20	03	0	
2044/1323	26.01	21.41	27.001	36.007	23.192	10.5	265	3	176	239	30	29	36	N	69	20	06	0	
2044/1330	26.72	21.35	27.094	36.010	23.197	8.6	262	10	285	205	30	29	40	N	69	20	07	0	
2044/1357	26.46	21.26	27.094	36.009	23.196	10.0	271	2	19	342	30	30	54	N	69	19	01	0	
2044/1412	26.97	21.65	27.012	35.995	23.180	9.4	267	3	2	61	***	***	***	*	***	***	***	*	
2044/1427	27.20	21.90	27.022	35.969	23.157	9.8	262	3	64	73	30	32	64	N	69	17	07	0	
2044/1442	27.75	22.23	27.029	35.955	23.144	10.1	261	4	09	118	30	32	94	N	69	14	05	0	
2044/1460	26.69	21.32	27.080	36.008	23.197	11.6	262	1	140	227	30	31	39	N	69	10	29	0	
2044/1465	26.59	21.21	27.067	36.012	23.207	10.4	267	1	9	05	238	30	31	31	N	69	9	60	0
2044/1630	26.59	21.23	27.062	36.014	23.211	11.7	250	1	03	103	30	31	40	N	69	0	40	0	
2044/1645	26.04	21.47	27.062	36.014	23.211	11.0	254	2	05	154	30	31	52	N	69	7	25	0	
2044/1700	*****	*****	27.064	36.016	23.211	11.9	255	2	02	154	30	31	65	N	69	6	02	0	
2044/1715	*****	*****	27.023	36.021	23.229	13.2	263	2	18	204	239	30	31	24	N	69	5	16	0
2044/1730	*****	*****	27.695	36.016	23.267	10.3	265	4	00	250	30	30	45	N	69	0	10	0	
2044/1745	*****	*****	27.673	36.006	23.267	5.9	259	5	2	265	264	30	30	08	N	69	11	34	0
2044/1800	*****	*****	27.668	35.997	23.261	6.1	250	5	2	266	265	30	29	08	N	69	14	52	0
2044/1815	*****	*****	27.668	35.998	23.262	9.2	247	3	5	196	193	30	29	60	N	69	16	74	0
2044/1830	26.77	21.36	27.671	35.993	23.258	11.4	262	2	4	75	232	30	29	41	N	69	15	60	0
2044/1845	26.62	21.22	27.667	35.997	23.262	11.4	285	1	2	46	263	30	30	00	N	69	15	05	0
2044/1900	26.60	21.31	27.657	35.998	23.266	11.4	258	2	0	142	163	30	29	92	N	69	14	26	0
2044/1915	26.79	21.39	27.667	35.986	23.254	10.9	254	2	4	116	161	30	29	41	N	69	12	91	0
2044/1930	26.03	21.41	27.647	35.975	23.252	11.1	255	2	5	119	161	30	28	06	N	69	11	56	0
2044/1945	26.75	21.35	27.656	35.966	23.242	11.9	261	2	2	121	100	30	28	30	N	69	10	26	0
2044/2000	26.65	21.27	27.670	35.970	23.240	12.2	262	7	136	232	38	27	00	N	69	9	77	0	

15 MINUTE APPROXES. DATA

DIG.Z	TA degE	TD degE	TS degE	SAL ppt	SIGT g/cm ³	WS m/sec	WD deg	SHOPS m/sec	CSF deg	HBG deg	LAT deg min	LONG deg min
204/2015	26.57	21.22	27.671	35.900	23.240	13.2	260	1.4	177	232	30 27 61 N	69 9 64 W
204/2030	26.45	21.15	27.653	35.999	23.260	13.7	260	3.0	229	234	30 26 57 N	69 10 67 W
204/2045	26.42	21.14	27.637	36.006	23.279	13.3	262	3.0	220	232	30 25 44 N	69 11 39 W
204/2059	26.44	21.18	27.574	35.966	23.270	13.3	262	3.0	223	234	30 24 35 N	69 13 17 W
204/2114	26.45	21.20	27.700	35.946	23.213	13.4	259	3.1	223	232	30 23 25 N	69 14 40 W
204/2129	26.49	21.20	27.805	35.931	23.167	13.2	264	3.1	226	234	30 22 17 N	69 15 02 W
204/2144	26.47	21.23	28.000	35.980	23.136	12.5	259	3.1	230	235	30 21 17 N	69 17 27 W
204/2159	26.39	21.23	28.095	36.001	23.124	12.7	259	3.1	234	235	30 20 21 N	69 18 20 W
204/2214	26.42	21.29	28.037	35.929	23.089	12.7	259	3.1	234	235	30 19 26 N	69 20 20 W
204/2229	26.41	21.27	28.037	35.919	23.006	13.1	260	3.0	234	234	30 18 32 N	69 21 22 W
204/2244	26.39	21.25	28.011	35.663	22.850	12.9	261	2.9	233	235	30 17 43 N	69 23 23 W
204/2259	26.39	21.25	28.136	35.729	22.906	12.4	260	3.0	235	235	30 16 50 N	69 24 24 W
204/2314	26.30	21.27	28.266	35.921	22.962	11.0	259	3.0	236	234	30 15 25 N	69 26 40 W
204/2329	26.35	21.24	28.306	35.948	23.014	10.5	251	3.1	237	235	30 14 32 N	69 27 51 W
204/2344	26.36	21.27	28.305	35.920	23.045	0.4	240	3.1	240	235	30 14 14 N	69 29 56 W
204/2359	26.30	21.29	28.347	36.081	23.099	9.4	243	3.3	241	236	30 13 30 N	69 31 22 W
205/0014	26.34	21.26	28.364	36.053	23.072	7.0	259	3.5	242	235	30 12 57 N	69 33 13 W
205/0029	26.27	21.23	28.375	36.036	23.056	5.9	230	3.5	243	236	30 11 77 N	69 35 17 W
205/0044	26.26	21.24	28.307	36.010	23.033	5.1	227	3.5	243	235	30 10 20 N	69 37 12 W
205/0059	26.24	21.25	28.096	35.797	22.970	5.0	229	3.5	244	236	30 10 22 N	69 39 00 W
205/0114	26.20	21.30	27.757	35.422	22.801	5.5	230	3.5	241	234	30 9 43 N	69 41 02 W
205/0129	26.21	21.26	27.643	35.350	22.790	4.6	227	3.5	230	231	30 9 53 N	69 42 02 W
205/0144	26.13	21.22	27.405	35.358	22.860	5.1	231	3.5	237	231	30 7 60 N	69 44 25 W
205/0159	26.07	21.13	27.306	35.350	22.875	7.1	243	3.6	230	232	30 6 66 N	69 46 63 W
205/0214	26.03	21.12	27.505	35.358	22.836	7.1	243	3.7	239	232	30 5 73 N	69 48 52 W
205/0229	25.93	21.01	27.130	35.358	22.955	7.2	236	3.6	241	232	30 4 84 N	69 50 54 W
205/0244	25.79	20.90	26.749	35.350	23.000	7.5	259	3.6	240	231	30 3 97 N	69 52 51 W
205/0259	25.76	20.98	26.013	35.358	23.060	7.3	244	3.7	243	234	30 3 13 N	69 54 50 W
205/0314	25.67	21.93	26.876	35.350	23.040	5.1	241	4.0	251	243	30 2 47 N	69 56 24 W
205/0329	25.60	20.84	26.703	35.197	22.974	6.7	242	4.1	238	228	30 1 62 N	69 58 00 W
205/0344	25.48	20.72	26.565	33.561	21.787	7.6	256	4.2	232	227	30 1 59 N	70 1 03 W
205/0359	25.45	20.70	26.386	33.327	21.660	7.3	257	4.3	232	228	30 59 11 N	70 3 11 W
205/0414	25.37	20.67	26.298	33.220	21.615	7.0	253	4.4	228	225	30 57 23 N	70 5 20 W
205/0429	25.30	20.71	26.251	33.129	21.560	7.5	246	4.6	222	221	30 55 14 N	70 7 12 W
205/0444	25.26	20.77	26.227	33.101	21.547	0.1	250	4.6	222	221	30 54 46 N	70 9 02 W
205/0459	25.18	20.02	25.976	32.993	21.544	8.4	251	4.7	223	222	30 52 77 N	70 10 50 W
205/0514	25.11	20.74	26.219	33.000	21.473	8.0	259	4.7	225	225	30 51 14 N	70 13 01 W
205/0529	25.14	20.47	26.611	33.525	21.746	8.0	257	4.8	230	231	30 49 59 N	70 15 17 W
205/0544	25.26	20.43	26.627	33.599	21.774	0.7	265	4.8	234	234	30 48 17 N	70 17 52 W
205/0559	25.15	20.46	26.639	33.430	21.671	7.5	259	4.0	234	235	30 46 79 N	70 19 22 W
205/0614	25.06	20.30	26.333	33.701	21.966	6.1	240	4.9	235	235	30 45 42 N	70 22 40 W
205/0629	24.97	20.15	26.154	34.251	22.435	5.5	250	4.9	235	233	30 44 05 N	70 24 01 W
205/0644	24.02	20.11	25.762	34.340	22.619	3.9	241	4.9	234	232	30 42 65 N	70 27 54 W
205/0659	24.30	19.98	25.733	34.340	22.634	4.0	240	4.9	231	231	30 41 10 N	70 29 20 W
205/0714	24.45	20.10	25.753	34.313	22.614	5.7	247	4.9	230	231	30 39 60 N	70 32 04 W
205/0729	24.51	20.16	25.733	34.341	22.635	4.3	236	4.9	230	230	30 38 17 N	70 34 36 W
205/0744	24.64	20.20	25.733	34.341	22.635	4.1	236	4.9	230	229	30 36 64 N	70 36 60 W
205/0759	24.69	20.08	25.733	34.342	22.635	7.8	253	4.0	229	229	30 35 05 N	70 38 24 W

15 MINUTE AVERAGES: DATA

DTG,Z	TA	TDP	TS	SAL	SIGI	WS	WD	SHIPS	USE	HOG	LAT	LONG
	degC	degC	degC	ppt	q/cm**3	m/sec	deg	m/sec	deg	deg	deg	deg
205/0014	24.52	19.84	25.733	34.341	22.635	0.5	266	4.7	229	229	37 33.42 N	70 43 14 W
205/0029	24.35	19.66	25.733	34.342	22.635	0.6	266	4.7	229	229	37 32.01 N	70 43 35 W
205/0044	24.14	19.49	25.733	34.334	22.632	7.0	260	4.7	230	230	37 30.53 N	70 45 00 W
205/0059	23.79	19.26	25.733	34.331	22.635	0.0	262	4.6	229	231	37 29.04 N	70 47 21 W
205/0014	24.00	19.40	25.733	34.332	22.636	0.1	259	4.6	229	231	37 27.56 N	70 49 02 W
205/0029	24.13	19.43	25.733	34.342	22.636	6.1	253	4.8	229	230	37 26.06 N	70 52 05 W
205/0044	24.21	19.44	25.733	34.290	22.602	6.0	254	4.7	231	230	37 24.57 N	70 54 30 W
205/0059	24.31	19.40	25.733	34.265	22.578	6.7	256	4.7	230	229	37 23.11 N	70 56 52 W
205/0014	24.20	19.40	25.733	34.256	22.571	6.6	256	4.7	230	229	37 21.62 N	70 50 21 W
205/0029	24.04	19.51	25.733	34.230	22.557	7.1	262	4.7	230	232	37 20.15 N	71 04 00
205/0044	23.00	19.52	25.733	34.225	22.540	7.2	263	4.7	230	231	37 18.66 N	71 03 12 W
205/0059	23.43	19.02	25.733	34.231	22.552	7.1	245	4.7	229	232	37 17.16 N	71 05 35 W
205/0113	23.32	10.82	25.733	34.236	22.556	7.0	251	4.7	220	231	37 15.67 N	71 07 50 W
205/0128	23.31	10.50	25.733	34.249	22.566	0.0	262	4.9	226	230	37 14.09 N	71 09 25 W
205/0143	23.27	10.60	25.733	34.233	22.553	5.6	264	5.0	227	220	37 12.40 N	71 11 50 W
205/0158	23.35	10.52	25.733	34.229	22.551	4.2	274	5.1	227	220	37 10.71 N	71 14 24 W
205/0228	23.23	10.54	25.733	34.247	22.564	7.6	301	6.9	220	230	37 08.31 N	71 16 13 W
205/0258	22.93	10.56	25.733	34.242	22.561	3.0	344	5.2	225	220	37 06.33 N	71 16 46 W
205/0283	22.90	10.64	25.733	34.249	22.566	3.7	0	5.1	227	230	37 04.60 N	71 19 20 W
205/0298	22.91	10.70	25.733	34.316	22.616	3.9	10	5.1	223	229	37 02.81 N	71 21 41 W
205/0313	22.90	10.82	25.733	34.346	22.638	4.3	25	5.1	235	244	37 01.16 N	71 23 23 W
205/0328	22.96	10.62	25.733	34.331	22.627	4.1	33	5.0	250	260	37 00.00 N	71 26 54 W
205/0343	23.11	10.63	25.733	34.272	22.583	4.2	40	4.0	274	206	36 59.80 N	71 29 54 W
205/0359	23.34	10.01	25.733	34.270	22.588	4.6	18	5	229	224	36 59.82 N	71 30 05 W
205/0414	23.62	19.03	24.466	34.320	23.011	6.9	49	4.1	220	37	***	***
205/0429	23.84	19.16	24.330	34.362	23.075	2.0	19	2.1	53	49	37 01.97 N	71 33 00 W
205/0444	23.95	19.22	24.205	34.369	23.136	5.6	357	5.1	55	97	***	***
205/0459	24.21	19.49	24.364	34.372	23.076	4.7	4	2.2	134	141	***	***
205/0514	24.50	19.60	24.940	34.332	22.872	5.7	352	2.0	103	190	36 59.47 N	71 26 25 W
205/0529	24.50	19.59	24.969	34.308	22.845	5.9	2	2.0	216	228	36 59.25 N	71 27 53 W
205/0544	***	***	24.811	34.271	22.865	5.4	5	2.7	254	225	36 57.64 N	71 28 27 W
205/0559	24.34	19.43	24.507	34.299	22.977	5.6	6	2.3	270	300	36 57.04 N	71 30 36 W
205/0614	24.48	19.50	24.363	34.353	23.055	6.4	0	1.4	265	281	36 50.03 N	71 31 40 W
205/0629	24.51	19.64	24.358	34.412	23.108	6.9	22	3.3	256	281	36 50.64 N	71 33 25 W
205/0644	24.50	19.64	24.525	34.409	23.055	6.9	6	6	240	257	36 50.47 N	71 33 50 W
205/0659	24.64	19.74	24.478	34.410	23.070	7.1	5	5	227	265	36 50.30 N	71 33 03 W
205/0714	24.50	19.60	24.528	34.415	23.059	7.2	11	2.2	238	237	36 57.94 N	71 34 05 W
205/0729	24.85	19.09	24.619	34.384	23.008	6.9	29	3.1	216	233	36 56.73 N	71 35 56 W

APPENDIX B: Parameter Summary

Parameters, calculated from the variables in accordance with IV. B, are tabulated in time here. The entrees are 15-minute averages. The parameters are:

<u>Parameter</u>	<u>Description</u>	<u>Units</u>
DTG, Z	Julian day/Greenwich time	day/hour, min
TA-TW	Air-water temperature difference	°C
TVA-TVW	Air-water virtual temperature difference (TVW is evaluated assuming air temperature and dew point equals water temp.-see IV.B).	°C
RH	Relative humidity	%
TAU	Stress from Smith (1980) parameterization	dyne/cm ²
CD	Drag Coefficient for momentum x 10 ³ (Smith, 1980)	- -
U*	Friction velocity	cm/sec
L	Monin-Obukhov length	m
Z0	Roughness height	cm
H	Sensible heat flux (Smith, 1980)	watt/m ²
E	Evaporative heat flux (Smith, 1980)	watt/m ²

15. PITCHER AVERAGE S. PITCHER PITCH

DATE	16-17	18-19	20-21	22-23	24-25	26-27	28-29	30-31	32-33	34-35	36-37	38-39	40-41	42-43	44-45	46-47	48-49	50-51	52-53	54-55	56-57	58-59	60-61	62-63	64-65	66-67	68-69	70-71	72-73	74-75	76-77	78-79	80-81	82-83	84-85	86-87	88-89	90-91	92-93	94-95	96-97	98-99	100-101	102-103	104-105	106-107	108-109	110-111	112-113	114-115	116-117	118-119	120-121	122-123	124-125	126-127	128-129	130-131	132-133	134-135	136-137	138-139	140-141	142-143	144-145	146-147	148-149	150-151	152-153	154-155	156-157	158-159	160-161	162-163	164-165	166-167	168-169	170-171	172-173	174-175	176-177	178-179	180-181	182-183	184-185	186-187	188-189	190-191	192-193	194-195	196-197	198-199	200-201	202-203	204-205	206-207	208-209	210-211	212-213	214-215	216-217	218-219	220-221	222-223	224-225	226-227	228-229	230-231	232-233	234-235	236-237	238-239	240-241	242-243	244-245	246-247	248-249	250-251	252-253	254-255	256-257	258-259	260-261	262-263	264-265	266-267	268-269	270-271	272-273	274-275	276-277	278-279	280-281	282-283	284-285	286-287	288-289	290-291	292-293	294-295	296-297	298-299	300-301	302-303	304-305	306-307	308-309	310-311	312-313	314-315	316-317	318-319	320-321	322-323	324-325	326-327	328-329	330-331	332-333	334-335	336-337	338-339	340-341	342-343	344-345	346-347	348-349	350-351	352-353	354-355	356-357	358-359	360-361	362-363	364-365	366-367	368-369	370-371	372-373	374-375	376-377	378-379	380-381	382-383	384-385	386-387	388-389	390-391	392-393	394-395	396-397	398-399	400-401	402-403	404-405	406-407	408-409	410-411	412-413	414-415	416-417	418-419	420-421	422-423	424-425	426-427	428-429	430-431	432-433	434-435	436-437	438-439	440-441	442-443	444-445	446-447	448-449	450-451	452-453	454-455	456-457	458-459	460-461	462-463	464-465	466-467	468-469	470-471	472-473	474-475	476-477	478-479	480-481	482-483	484-485	486-487	488-489	490-491	492-493	494-495	496-497	498-499	500-501	502-503	504-505	506-507	508-509	510-511	512-513	514-515	516-517	518-519	520-521	522-523	524-525	526-527	528-529	530-531	532-533	534-535	536-537	538-539	540-541	542-543	544-545	546-547	548-549	550-551	552-553	554-555	556-557	558-559	560-561	562-563	564-565	566-567	568-569	570-571	572-573	574-575	576-577	578-579	580-581	582-583	584-585	586-587	588-589	590-591	592-593	594-595	596-597	598-599	600-601	602-603	604-605	606-607	608-609	610-611	612-613	614-615	616-617	618-619	620-621	622-623	624-625	626-627	628-629	630-631	632-633	634-635	636-637	638-639	640-641	642-643	644-645	646-647	648-649	650-651	652-653	654-655	656-657	658-659	660-661	662-663	664-665	666-667	668-669	670-671	672-673	674-675	676-677	678-679	680-681	682-683	684-685	686-687	688-689	690-691	692-693	694-695	696-697	698-699	700-701	702-703	704-705	706-707	708-709	710-711	712-713	714-715	716-717	718-719	720-721	722-723	724-725	726-727	728-729	730-731	732-733	734-735	736-737	738-739	740-741	742-743	744-745	746-747	748-749	750-751	752-753	754-755	756-757	758-759	760-761	762-763	764-765	766-767	768-769	770-771	772-773	774-775	776-777	778-779	780-781	782-783	784-785	786-787	788-789	790-791	792-793	794-795	796-797	798-799	800-801	802-803	804-805	806-807	808-809	810-811	812-813	814-815	816-817	818-819	820-821	822-823	824-825	826-827	828-829	830-831	832-833	834-835	836-837	838-839	840-841	842-843	844-845	846-847	848-849	850-851	852-853	854-855	856-857	858-859	860-861	862-863	864-865	866-867	868-869	870-871	872-873	874-875	876-877	878-879	880-881	882-883	884-885	886-887	888-889	890-891	892-893	894-895	896-897	898-899	900-901	902-903	904-905	906-907	908-909	910-911	912-913	914-915	916-917	918-919	920-921	922-923	924-925	926-927	928-929	930-931	932-933	934-935	936-937	938-939	940-941	942-943	944-945	946-947	948-949	950-951	952-953	954-955	956-957	958-959	960-961	962-963	964-965	966-967	968-969	970-971	972-973	974-975	976-977	978-979	980-981	982-983	984-985	986-987	988-989	990-991	992-993	994-995	996-997	998-999	1000-1001	1002-1003	1004-1005	1006-1007	1008-1009	1010-1011	1012-1013	1014-1015	1016-1017	1018-1019	1020-1021	1022-1023	1024-1025	1026-1027	1028-1029	1030-1031	1032-1033	1034-1035	1036-1037	1038-1039	1040-1041	1042-1043	1044-1045	1046-1047	1048-1049	1050-1051	1052-1053	1054-1055	1056-1057	1058-1059	1060-1061	1062-1063	1064-1065	1066-1067	1068-1069	1070-1071	1072-1073	1074-1075	1076-1077	1078-1079	1080-1081	1082-1083	1084-1085	1086-1087	1088-1089	1090-1091	1092-1093	1094-1095	1096-1097	1098-1099	1100-1101	1102-1103	1104-1105	1106-1107	1108-1109	1110-1111	1112-1113	1114-1115	1116-1117	1118-1119	1120-1121	1122-1123	1124-1125	1126-1127	1128-1129	1130-1131	1132-1133	1134-1135	1136-1137	1138-1139	1140-1141	1142-1143	1144-1145	1146-1147	1148-1149	1150-1151	1152-1153	1154-1155	1156-1157	1158-1159	1160-1161	1162-1163	1164-1165	1166-1167	1168-1169	1170-1171	1172-1173	1174-1175	1176-1177	1178-1179	1180-1181	1182-1183	1184-1185	1186-1187	1188-1189	1190-1191	1192-1193	1194-1195	1196-1197	1198-1199	1200-1201	1202-1203	1204-1205	1206-1207	1208-1209	1210-1211	1212-1213	1214-1215	1216-1217	1218-1219	1220-1221	1222-1223	1224-1225	1226-1227	1228-1229	1230-1231	1232-1233	1234-1235	1236-1237	1238-1239	1240-1241	1242-1243	1244-1245	1246-1247	1248-1249	1250-1251	1252-1253	1254-1255	1256-1257	1258-1259	1260-1261	1262-1263	1264-1265	1266-1267	1268-1269	1270-1271	1272-1273	1274-1275	1276-1277	1278-1279	1280-1281	1282-1283	1284-1285	1286-1287	1288-1289	1290-1291	1292-1293	1294-1295	1296-1297	1298-1299	1300-1301	1302-1303	1304-1305	1306-1307	1308-1309	1310-1311	1312-1313	1314-1315	1316-1317	1318-1319	1320-1321	1322-1323	1324-1325	1326-1327	1328-1329	1330-1331	1332-1333	1334-1335	1336-1337	1338-1339	1340-1341	1342-1343	1344-1345	1346-1347	1348-1349	1350-1351	1352-1353	1354-1355	1356-1357	1358-1359	1360-1361	1362-1363	1364-1365	1366-1367	1368-1369	1370-1371	1372-1373	1374-1375	1376-1377	1378-1379	1380-1381	1382-1383	1384-1385	1386-1387	1388-1389	1390-1391	1392-1393	1394-1395	1396-1397	1398-1399	1400-1401	1402-1403	1404-1405	1406-1407	1408-1409	1410-1411	1412-1413	1414-1415	1416-1417	1418-1419	1420-1421	1422-1423	1424-1425	1426-1427	1428-1429	1430-1431	1432-1433	1434-1435	1436-1437	1438-1439	1440-1441	1442-1443	1444-1445	1446-1447	1448-1449	1450-1451	1452-1453	1454-1455	1456-1457	1458-1459	1460-1461	1462-1463	1464-1465	1466-1467	1468-1469	1470-1471	1472-1473	1474-1475	1476-1477	1478-1479	1480-1481	1482-1483	1484-1485	1486-1487	1488-1489	1490-1491	1492-1493	1494-1495	1496-1497	1498-1499	1500-1501	1502-1503	1504-1505	1506-1507	1508-1509	1510-1511	1512-1513	1514-1515	1516-1517	1518-1519	1520-1521	1522-1523	1524-1525	1526-1527	1528-1529	1530-1531	1532-1533	1534-1535	1536-1537	1538-1539	1540-1541	1542-1543	1544-1545	1546-1547	1548-1549	1550-1551	1552-1553	1554-1555	1556-1557	1558-1559	1560-1561	1562-1563	1564-1565	1566-1567	1568-1569	1570-1571	1572-1573	1574-1575	1576-1577	1578-1579	1580-1581	1582-1583	1584-1585	1586-1587	1588-1589	1590-1591	1592-1593	1594-1595	1596-1597	1598-1599	1600-1601	1602-1603	1604-1605	1606-1607	1608-1609	1610-1611	1612-1613	1614-1615	1616-1617	1618-1619	1620-1621	1622-1623	1624-1625	1626-1627	1628-1629	1630-1631	1632-1633	1634-1635	1636-1637	1638-1639	1640-1641	1642-1643	1644-1645	1646-1647	1648-1649	1650-1651	1652-1653	1654-1655	1656-1657	1658-1659	1660-1661	1662-1663	1664-1665	1666-1667	1668-1669	1670-1671	1672-1673	1674-1675	1676-1677	1678-1679	1680-1681	1682-1683	1684-1685	1686-1687	1688-1689	1690-1691	1692-1693	1694-1695	1696-1697	1698-1699	1700-1701	1702-1703	1704-1705	1706-1707	1708-1709	1710-1711	1712-1713	1714-1715	1716-1717	1718-1719	1720-1721	1722-1723	1724-1725	1726-1727	1728-1729	1730-1731	1732-1733	1734-1735	1736-1737	1738-1739	1740-1741	1742-1743	1744-1745	1746-1747	1748-1749	1750-1751	1752-1753	1754-1755	1756-1757	1758-1759	1760-1761	1762-1763	1764-1765	1766-1767	1768-1769	1770-1771	1772-1773	1774-1775	1776-1777	1778-1779	1780-1781	1782-1783	1784-1785	1786-1787	1788-1789	1790-1791	1792-1793	1794-1795	1796-1797	1798-1799	1800-1801	1802-1803	1804-1805	1806-1807	1808-1809	1810-1811	1812-1813	1814-1815	1816-1817	1818-1819	1820-1821	1822-1823	1824-1825	1826-1827	1828-1829	1830-1831	1832-1833	1834-1835	1836-1837	1838-1839	1840-1841	1842-1843	1844-1845	1846-1847	1848-1849	1850-1851	1852-1853	1854-1855	1856-1857	1858-1859	1860-1861	1862-1863	1864-1865	1866-1867	1868-1869	1870-1871	1872-1873	1874-1875	1876-1877	1878-1879	1880-1881	1882-1883	1884-1885	1886-1887	1888-1889	1890-1891	1892-1893	1894-1895	1896-1897	1898-1899	1900-1901	1902-1903	1904-1905	1906-1907	1908-1909	1910-1911	1912-1913	1914-1915	1916-1917	1918-1919	1920-1921	1922-1923	192
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45 MINUTE AUCROWAYS PORADO TFFS

DTG, Z	10-TW degC	106-TW degC	RU %	CAU d/cm**2	CD X10-3	10K cm/sec	I %	Z0 cm	H g/m**2	F g/m**2
109/1900	-2.35	-3.07	73	063	70	7.36	-2.0	60160-03	10.279	79.403
109/1923	-2.37	-3.93	72	070	70	7.23	-2.4	55221-03	10.625	85.780
109/1930	-2.25	-3.79	72	177	07	12.20	-2.9	19011-02	22.042	127.230
109/1953	-2.14	-3.69	71	155	06	11.51	-6.0	16654-02	20.030	121.757
109/2008	-3.05	-3.30	71	127	04	10.41	-3.6	13661-02	10.714	109.969
109/2023	-1.06	-3.39	71	153	06	11.44	-2.2	16991-02	19.404	112.823
109/2038	-1.05	-3.33	72	240	91	14.32	-12.9	25014-02	21.332	139.673
109/2051	-1.07	-3.36	72	251	91	14.64	-13.6	22000-02	21.597	139.000
109/2100	-1.09	-3.37	73	324	95	16.57	-18.5	33601-02	22.949	150.267
109/2120	-1.06	-3.20	74	406	90	16.64	-25.1	43755-02	24.052	166.634
109/2143	-1.00	-3.19	75	487	101	20.41	-32.2	52401-02	24.639	177.262
109/2150	-1.07	-3.29	74	457	100	19.26	-29.1	49211-02	24.762	175.056
109/2213	-1.94	-3.34	75	590	105	22.46	-32.2	63541-02	26.530	192.640
109/2220	-1.76	-3.18	74	614	105	22.93	-43.0	66231-02	25.709	197.910
109/2243	-1.04	-3.25	75	545	102	21.60	-35.7	50791-02	25.637	187.023
109/2258	-1.95	-3.32	76	492	102	20.62	-31.2	53021-02	25.065	174.320
109/2313	-1.05	-3.24	75	520	103	21.10	-34.5	56091-02	25.322	182.100
109/2320	-2.21	-3.62	77	301	97	16.04	-21.0	41001-02	26.119	161.075
109/2343	-2.15	-3.49	78	440	97	17.93	-20.3	40501-02	26.540	156.717
109/2350	-2.15	-3.49	78	440	97	17.93	-20.3	40501-02	26.747	164.803
190/0013	-2.40	-3.77	78	306	94	16.17	-15.2	32961-02	25.954	143.262
190/0020	-2.46	-3.82	79	307	90	16.19	-20.0	41661-02	23.016	152.103
190/0043	-2.44	-3.77	80	314	90	16.11	-19.9	41341-02	22.016	152.145
190/0058	-2.56	-3.91	80	407	99	18.06	-21.4	44811-02	22.267	159.742
190/0113	-2.59	-3.92	79	394	90	16.31	-19.0	42361-02	22.101	161.656
190/0120	-2.56	-3.96	79	435	99	19.27	-22.5	46791-02	22.874	163.159
190/0143	-2.54	-3.90	80	426	99	19.00	-22.1	45081-02	22.337	162.710
190/0150	-2.51	-3.87	79	452	100	19.85	-24.0	48641-02	22.526	167.523
190/0213	-2.50	-3.86	80	493	102	20.52	-26.7	53071-02	30.170	172.379
190/0220	-2.40	-3.78	81	568	104	22.03	-32.8	61141-02	31.159	174.942
190/0243	-2.47	-3.74	82	626	106	23.13	-36.1	67371-02	31.903	177.613
190/0258	-2.41	-3.67	82	605	107	24.20	-41.0	73591-02	32.227	182.403
190/0313	-2.37	-3.62	82	676	107	24.04	-40.0	72791-02	31.710	181.265
190/0320	-2.39	-3.67	81	741	109	25.16	-45.4	79741-02	32.785	192.069
190/0343	-2.39	-3.66	81	765	110	25.56	-47.2	82311-02	33.007	192.917
190/0358	-2.37	-3.62	82	600	107	24.12	-41.1	73571-02	31.793	181.207
190/0413	-2.29	-3.52	82	769	110	25.81	-48.9	82091-02	32.169	187.217
190/0428	-2.07	-3.28	81	504	102	20.75	-31.0	54261-02	26.937	155.941
190/0443	-1.08	-3.09	80	545	103	21.60	-36.2	58791-02	25.967	159.668
190/0450	-1.81	-2.98	81	723	109	24.03	-52.0	77961-02	27.199	174.270
190/0513	-1.73	-2.89	80	657	104	21.03	-39.1	60061-02	24.047	155.014
190/0529	-1.65	-2.79	81	657	107	23.72	-49.5	70071-02	25.122	163.916
190/0544	-1.82	-2.92	82	716	100	24.76	-51.9	77211-02	27.241	163.162
190/0559	-1.78	-2.77	85	673	107	24.00	-48.7	72591-02	26.438	143.751
190/0614	-1.59	-2.50	86	508	105	22.42	-43.0	63371-02	23.907	124.500
190/0629	-1.99	-1.76	85	566	104	21.99	-52.6	60921-02	10.010	103.704
190/0644	-1.19	-1.00	85	511	102	20.91	-70.0	55071-02	12.169	79.727
190/0659	0.06	-1.49	84	359	97	17.52	-49.2	50601-02	10.201	63.646

15. MINUTE AVERAGE: PARCEL 11R5

015 Z	1A-1W degC	1V6-1VW degC	RH Z	1A0 d/cm ²	1D X10 ⁻³	1K cm/sec	1 m	Z0 cm	U m/sec	V m/sec
190/0714	.35	-.06	09	270	.92	15.17	-35.5	2900E-02	9.160	32.452
190/0729	1.09	1.05	92	262	.92	14.92	-74.0	2000E-02	4.199	4.354
190/0744	.66	.63	95	313	.94	16.28	-62.2	3340E-02	6.473	4.053
190/0759	.02	-.10	96	307	.94	16.19	-36.0	3200E-02	10.639	6.025
190/0814	-.08	-.21	96	298	.93	15.67	-31.9	3094E-02	11.235	13.931
190/0829	-.14	-.28	96	324	.95	16.37	-36.9	3460E-02	11.666	15.747
190/0844	-.13	-.28	96	309	.94	16.17	-34.1	3296E-02	11.589	16.052
190/0859	-.05	-.19	96	236	.91	13.15	-24.9	2520E-02	11.041	12.944
190/0914	.22	.11	95	209	.89	13.31	-23.1	2233E-02	9.539	10.419
190/0929	.29	.18	95	221	.90	13.69	-26.2	2362E-02	9.140	10.585
190/0944	.32	-.14	03	233	.90	14.04	-29.0	2484E-02	0.922	45.207
190/0959	.37	.24	93	245	.91	13.39	-32.4	2610E-02	3.598	13.238
190/1014	.13	-.07	92	253	.94	14.66	-29.4	2700E-02	9.969	20.740
190/1029	.50	.36	92	262	.92	14.09	-39.7	2792E-02	7.763	19.124
190/1044	.45	.37	93	287	.93	15.60	-44.0	3064E-02	7.900	15.157
190/1059	.42	.27	93	336	.95	16.16	-56.2	3403E-02	7.965	16.729
190/1114	.63	.51	92	381	.97	17.97	-65.5	4066E-02	6.339	14.602
190/1129	.63	.49	92	400	.93	10.41	-93.4	4270E-02	6.233	17.134
190/1144	.84	.75	92	274	.93	15.24	-59.0	2927E-02	5.998	10.346
190/1159	.80	.62	93	269	.92	15.10	-59.2	2902E-02	5.427	6.351
190/1214	.88	.84	93	333	.95	16.79	-90.5	3554E-02	4.083	5.203
190/1229	1.00	.99	93	383	.97	18.00	-140.7	4003E-02	3.860	2.386
190/1244	.84	.79	93	459	1.00	19.73	-166.1	4902E-02	4.331	0.021
190/1259	.95	.91	93	450	1.00	19.54	-194.9	5000E-02	3.570	6.733
190/1314	1.08	1.05	92	479	1.01	20.14	-310.4	5611E-02	2.395	4.607
190/1329	.93	.88	92	310	.95	16.15	-100.5	3400E-02	4.625	6.952
190/1443	1.20	1.25	91	506	1.02	20.72	-136.0	5306E-02	6.10	5.002
190/1458	1.03	1.02	93	479	1.01	20.14	-200.0	5011E-02	2.723	3.630
190/1513	1.45	1.45	91	351	.96	17.27	-530.2	3256E-02	.027	1.639
190/1528	1.38	1.30	92	626	1.06	23.05	2209.8	6691E-02	.517	1.029
190/1544	1.20	1.20	93	820	1.11	26.37	2064.2	8763E-02	.029	1.604
190/1559	1.35	1.35	92	861	1.12	27.05	729.9	9204E-02	-2.591	1.179
190/1614	1.41	1.42	91	769	1.10	25.05	600.4	8442E-02	-2.695	0.020
190/1629	1.46	1.47	91	769	1.10	25.09	517.9	8442E-02	-3.154	0.027
190/1644	1.54	1.56	91	776	1.10	25.60	416.3	8330E-02	-3.296	-1.550
190/1659	1.79	1.84	98	557	1.04	21.76	236.3	3963E-02	-4.064	-3.964
190/1714	1.47	1.52	92	801	1.10	26.09	497.6	8579E-02	-3.343	-5.604
190/1729	1.54	1.63	93	524	1.03	21.10	510.6	5609E-02	-1.689	-9.022
190/1744	1.36	1.43	94	430	.99	19.12	-1059.1	4606E-02	.615	-6.671
190/1759	1.26	1.32	94	469	1.01	19.55	-682.1	5015E-02	1.006	-6.253
190/1814	1.37	1.43	93	414	.99	18.75	-839.2	4420E-02	.750	-6.000
190/1829	.96	.99	95	373	.97	17.78	-131.0	3903E-02	9.001	-1.405
190/1844	.58	.53	95	153	.86	13.37	-17.2	1630E-02	7.974	4.740
190/1859	-.20	-.38	98	173	.87	12.00	-13.5	1039E-02	12.199	3.433
190/1914	-.04	-.17	96	315	.94	16.32	-36.7	3355E-02	11.041	14.306
190/1929	.16	.05	95	883	.88	0.35	-5.3	6791E-03	10.181	7.024
190/1944	.15	.02	94	158	.86	11.58	-14.4	1600E-02	10.020	11.313
191/0154	.21	.07	93	199	.88	12.93	-20.8	2107E-02	9.716	12.052

15 MINUTE AVERAGE: 10001185

DATE	Z	(W-TW) degE	RA Z	10d d/cmsec ²	QD X10-3	10k cm/sec	L m	70 cm	H m/msec ²	E m/msec ²
1911/02/09	1.50	1.64	95	0.83	7.3	5.22	-1.0	3.933E-03	7.275	-3.959
1911/02/24	2.14	2.39	97	0.86	7.4	5.43	-2.0	3.794E-03	5.537	-1.0 0.00
1911/02/39	2.24	2.50	97	0.92	7.6	6.55	-3.1	3.423E-03	4.294	-3.2 0.72
1911/02/54	3.26	3.67	97	0.70	7.0	7.67	7.50 7	7.402E-03	-1.402	-2.2 7.65
1911/03/09	3.07	3.46	90	0.96	0.1	0.97	6.3 2	3.003E-02	-1.051	-2.5 0.66
1911/03/24	3.00	3.39	99	0.02	6.0	3.11	-4	1.222E-03	6.508	-9.5 6.23
1911/03/39	3.53	3.97	90	0.05	7.0	3.56	-0	1.596E-03	5.005	-1.2 1.43
1911/03/54	3.90	4.39	90	0.70	7.9	4.07	1.6 4	6.246E-03	-2.995	-2.0 6.46
1911/04/09	3.29	3.71	98	1.00	0.2	9.50	30.2	1.137E-02	-2.655	-2.0 3.95
1911/04/24	2.22	2.56	90	1.02	0.1	9.71	-3.5 5	1.069E-02	2.004	-1.0 2.29
1911/04/39	3.27	3.60	90	0.03	0.0	0.37	5.3 2	0.725E-03	-1.053	-2.4 7.07
1911/04/54	3.64	4.09	94	0.71	7.0	7.67	2.0 0	7.402E-03	-1.464	-2.5 7.59
1911/05/09	3.16	3.56	99	0.61	7.7	7.14	-40.9	6.423E-03	0.835	-2.3 1.03
1911/05/24	3.65	4.10	99	0.67	6.0	4.40	21.1	9.059E-03	-2.705	-2.7 7.00
1911/05/39	4.57	5.12	99	0.53	7.6	6.65	9.9	5.574E-03	-2.704	-2.7 4.55
1911/05/54	5.29	5.95	88	0.64	7.0	7.29	5.7	6.240E-02	-6.390	-5.5 5.32
1911/06/09	4.24	4.74	88	1.56	0.5	11.34	1.0 2	1.620E-02	-9.602	-4.0 5.60
1911/06/24	2.21	2.47	88	2.07	0.9	1.3 04	10.6 5	2.191E-02	-1.124	-2.4 0.34
1911/06/39	3.65	4.10	88	2.65	9.2	14.70	26.6	2.252E-02	-4.139	-9.5 0.79
1911/06/55	3.30	3.79	88	3.06	9.4	15.05	5.3 9	3.165E-02	-11.007	-4.4 6.16
1911/07/10	4.24	4.74	88	2.50	9.1	14.32	19.2	2.504E-02	-14.323	-5.0 0.39
1911/07/25	3.69	4.16	88	2.51	9.1	11.31	8.8 5	2.500E-02	8.8 5.23	8.8 5.23
1911/07/40	3.23	3.67	88	2.90	9.3	15.47	27.5	2.929E-02	-12.463	-5.0 3.23
1911/07/55	3.23	3.67	88	2.53	9.1	14.39	33.5	2.610E-02	-0.330	-4.5 0.74
1911/08/10	2.26	2.56	88	2.93	0.9	13.24	130.3	2.234E-02	-1.572	-2.0 0.89
1911/08/25	3.01	4.25	88	5.50	1.63	21.41	43.3 2	5.774E-02	-2.0 9.30	-6.2 7.50
1911/08/40	3.69	4.17	88	5.05	1.04	21.91	47.0	6.049E-02	-2.0 6.00	-6.1 5.60
1911/08/55	2.50	2.76	84	2.17	0.9	13.31	74.3	2.233E-02	-2.973	-2.5 4.94
1911/09/10	2.13	2.35	99	1.15	0.5	10.00	32.0	1.490E-02	1.020	-1.7 1.11
1911/09/25	2.05	2.25	99	2.35	0.9	13.24	52.4	2.210E-02	-4.17	-1.9 0.33
1911/09/40	2.20	2.51	99	0.42	7.4	5.04	-3.0	4.227E-03	4.951	-1.0 4.73
1911/09/55	1.90	2.09	99	1.10	0.2	9.47	-2.5 1	1.130E-02	3.174	-1.3 0.01
1911/10/10	1.19	1.30	99	1.15	0.2	9.66	-4.3 9	1.176E-02	6.000	-7.6 6.95
1911/10/25	1.20	1.32	99	2.09	0.	13.04	-4.6 4	1.214E-02	4.974	-1.0 7.65
1911/10/40	90	1.00	99	2.97	9.3	15.53	-7.2 6	3.030E-02	4.034	-1.0 1.96
1911/10/55	1.31	1.43	99	2.20	0.9	13.30	-6.0 3	2.556E-02	3.727	-1.1 7.06
1911/11/10	1.20	1.33	88	3.32	9.5	16.43	-4.30 2	3.400E-02	3.007	-1.4 0.92
1911/11/25	90	1.01	88	1.41	0.4	10.71	-1.6 5	1.445E-02	6.972	-0.1 4.70
1911/11/40	74	0.85	88	1.32	0.2	9.53	-3.0 1	1.145E-02	0.074	-0.0 0.2
1911/11/55	99	1.14	88	2.66	9.2	14.71	-5.0 0	2.226E-02	5.077	-1.5 5.72
1911/12/10	1.28	1.44	88	3.10	9.4	15.09	-3.30 0	3.179E-02	2.762	-1.0 6.73
1911/12/25	1.51	1.69	88	3.50	9.5	16.06	-6.32 7	3.483E-02	6.99	-2.1 2.12
1911/12/40	88	88	88	88	88	88	88	88	88	88
1911/12/57	88	88	88	88	88	88	88	88	88	88
1911/13/12	88	88	88	88	88	88	88	88	88	88
1911/13/27	88	88	88	88	88	88	88	88	88	88
1911/13/42	88	88	88	88	88	88	88	88	88	88
1911/13/57	88	88	88	88	88	88	88	88	88	88
1911/14/12	88	88	88	88	88	88	88	88	88	88
1911/14/27	88	88	88	88	88	88	88	88	88	88
1911/14/42	88	88	88	88	88	88	88	88	88	88
1911/14/57	88	88	88	88	88	88	88	88	88	88
1911/15/12	88	88	88	88	88	88	88	88	88	88
1911/15/27	88	88	88	88	88	88	88	88	88	88
1911/15/42	88	88	88	88	88	88	88	88	88	88
1911/15/57	88	88	88	88	88	88	88	88	88	88

15 MINUTE AVERAGES: PARACHUTERS

DATE	10-10 degC	10-10M degC	RH %	100 d/cm ²	CO x10-3	HA cm/sec	M	Z0 cm	W/m ²	W/m ²
191/1412	*****	*****	88	*****	*****	*****	*****	*****	*****	*****
191/1432	*****	*****	88	*****	*****	*****	*****	*****	*****	*****
191/1447	*****	*****	88	*****	*****	*****	*****	*****	*****	*****
191/1502	*****	*****	90	*****	*****	*****	*****	*****	*****	*****
191/1517	*****	*****	96	*****	*****	*****	*****	*****	*****	*****
191/1532	*****	*****	97	*****	*****	*****	*****	*****	*****	*****
191/1547	*****	*****	96	*****	*****	*****	*****	*****	*****	*****
191/1602	*****	*****	95	*****	*****	*****	*****	*****	*****	*****
191/1617	*****	*****	95	*****	*****	*****	*****	*****	*****	*****
191/1632	*****	*****	94	*****	*****	*****	*****	*****	*****	*****
191/1647	*****	*****	93	*****	*****	*****	*****	*****	*****	*****
191/1702	5.55	6.06	93	116	02	9.70	6.9	1200E-02	-12.661	-36.107
191/1717	5.33	5.80	93	165	06	11.67	9.6	1374E-02	-15.583	-39.036
191/1732	5.32	5.77	91	168	06	11.00	9.0	1750E-02	-15.749	-37.230
191/1747	5.53	5.90	90	143	04	10.70	0.0	1464E-02	-14.692	-34.702
191/1802	3.66	3.69	91	*****	*****	*****	*****	*****	*****	*****
191/1817	5.30	5.73	91	004	00	0.34	6.3	0756E-03	-0.637	-26.200
191/1832	5.63	6.12	91	071	70	7.65	5.0	2360E-03	-0.292	-27.446
191/1847	5.16	5.60	92	093	00	0.77	7.0	9608E-03	-0.970	-20.473
191/1902	5.39	5.84	91	132	04	0.42	7.9	1360E-02	-13.332	-33.200
191/1917	5.23	5.65	90	079	79	0.16	6.3	0257E-03	-7.075	-24.346
191/1932	5.30	5.83	91	057	77	6.04	5.3	5900E-03	-5.652	-25.069
191/1947	5.39	5.85	91	033	73	5.24	6.5	5454E-03	-2.076	-10.310
191/2002	5.13	5.55	91	071	70	7.89	6.4	2338E-03	-6.583	-23.000
191/2017	5.35	5.80	91	075	79	7.09	5.9	2036E-03	-7.042	-26.040
191/2032	5.30	5.82	90	066	70	7.39	5.5	0000E-03	-6.075	-23.006
191/2047	5.20	5.62	90	044	75	6.04	6.1	4600E-03	-3.300	-19.057
191/2102	5.43	5.86	89	070	78	7.50	5.5	2247E-03	-7.422	-23.412
191/2117	5.27	5.67	89	065	70	7.35	5.0	6000E-03	-6.404	-24.000
191/2132	5.02	5.42	90	108	02	9.43	0.1	1132E-02	-9.776	-26.026
191/2147	5.24	5.65	90	044	75	6.03	6.0	4548E-03	-3.406	-10.273
191/2202	5.39	5.82	90	056	76	6.77	5.3	5775E-03	-5.529	-21.601
191/2217	5.12	5.53	90	025	72	4.57	-14.1	2628E-03	-0.63	-14.190
191/2232	4.90	5.29	90	057	77	6.88	7.1	5965E-03	-4.270	-12.031
191/2247	5.15	5.57	91	024	71	4.43	-21.5	2445E-03	-3.72	-14.195
191/2305	*****	*****	88	*****	*****	*****	*****	*****	*****	*****
191/2320	2.72	2.86	88	*****	*****	*****	*****	*****	*****	*****
191/2335	2.67	2.82	88	*****	*****	*****	*****	*****	*****	*****
191/2355	5.11	5.49	89	037	74	5.57	7.7	3903E-03	-2.104	-15.723
192/0010	5.16	5.53	88	040	74	5.70	6.0	4161E-03	-2.500	-16.009
192/0025	5.36	5.70	90	022	71	4.29	-37.0	2324E-03	-2.00	-14.003
192/0040	4.60	5.03	90	025	72	4.52	-7.7	2570E-03	-1.119	-12.152
192/0055	4.77	5.13	90	107	02	9.30	9.0	1100E-02	-0.633	-24.400
192/0110	4.89	5.29	91	066	70	7.30	7.2	6064E-03	-5.233	-21.270
192/0125	4.60	5.09	93	058	77	6.94	0.5	6061E-03	-3.694	-24.300
192/0140	4.49	4.88	93	034	73	5.30	-110.5	3538E-03	-0.13	-15.251
192/0155	4.71	5.09	91	089	80	8.56	0.5	9220E-03	-6.877	-23.614
192/0210	4.53	4.92	94	112	82	9.61	10.3	1164E-02	-0.039	-27.504

45 MIDDLE AVERAGES: PARADEUTS

DATE	Z	1A-10 degC	10A-10M degF	RH %	100 d/cm ²	10 x10 ⁻³	UE cm/sec	1 m	Z0 cm	11 m/cm ²	F m/cm ²
192/0225	4.19	4.59	4.59	96	.050	.76	6.41	19.0	5120E-03	-1.204	-19.462
192/0240	4.70	4.58	4.58	95	.069	.70	7.55	12.5	7120E-03	-3.214	-21.724
192/0255	4.47	4.06	4.06	94	.110	.70	3.85	-1.9	1020E-03	2.879	-11.065
192/0310	4.69	5.09	5.09	93	.024	.71	4.42	-6.2	2460E-03	1.294	-13.734
192/0325	4.74	5.12	5.12	94	.034	.73	5.00	26.7	3369E-03	-0.44	-14.213
192/0340	4.72	5.13	5.13	90	.034	.73	5.30	20.3	3530E-03	-605	-14.470
192/0355	4.39	4.74	4.74	92	.097	.01	0.90	10.6	1011E-02	-6.345	-22.549
192/0410	4.72	5.12	5.12	92	.065	.70	7.35	0.1	6266E-03	-4.567	-21.412
192/0425	3.90	4.26	4.26	96	.076	.79	7.00	16.9	7032E-03	-2.723	-21.340
192/0440	4.17	4.56	4.56	96	.095	.01	8.07	17.3	5004E-03	-5.248	-25.710
192/0455	3.73	4.00	4.00	96	.069	.70	7.54	24.7	7153E-03	-1.625	-19.536
192/0510	2.78	3.05	3.05	99	.096	.01	8.06	-41.9	9004E-03	155	-14.275
192/0525	2.97	3.27	3.27	99	.100	.02	9.42	61.9	1110E-02	-1.264	-21.133
192/0540	3.07	3.39	3.39	99	.005	.66	2.01	-1	5072E-04	8.082	-5.361
192/0555	3.61	4.00	4.00	99	.065	.77	7.24	43.6	6674E-03	-0.20	-21.354
192/0610	3.32	3.60	3.60	99	.194	.00	12.60	27.0	2000E-02	-6.740	-22.245
192/0625	2.79	3.09	3.09	99	.132	.04	10.40	66.5	1362E-02	-1.502	-22.506
192/0640	3.07	3.48	3.48	88	.104	.01	9.24	50.6	1075E-02	-1.450	-22.665
192/0655	3.34	3.67	3.67	88	.006	.66	2.25	-1	6304E-04	2.453	-6.640
192/0710	3.68	4.00	4.00	99	.019	.70	3.96	-1.4	1973E-03	4.163	-12.726
192/0725	3.69	4.08	4.08	88	.005	.66	2.11	-1	5594E-04	2.203	-7.035
192/0740	2.01	3.11	3.11	88	.015	.69	3.46	-6	1504E-03	6.446	-4.400
192/0755	2.52	2.79	2.79	88	.023	.71	4.32	-1.3	3351E-03	5.960	-9.160
192/0810	2.37	2.62	2.62	99	.090	.00	0.59	-22.5	9305E-03	2.015	-15.773
192/0825	2.01	3.10	3.10	99	.119	.03	9.07	03.6	1226E-02	-1.076	-21.410
192/0840	1.22	1.34	1.34	88	.036	.74	5.40	-1.0	3681E-03	0.100	-5.209
192/0855	.99	1.00	1.00	88	.093	.00	0.71	-0.4	9559E-03	7.347	-6.100
192/0910	1.75	1.77	1.77	99	*****	*****	*****	*****	*****	*****	*****
192/0926	.76	.77	.77	88	*****	*****	*****	*****	*****	*****	*****
192/0941	.71	.72	.72	88	*****	*****	*****	*****	*****	*****	*****
192/0956	1.56	1.71	1.71	99	.206	.00	12.96	-00.6	2117E-02	2.533	-14.436
192/1011	1.44	1.50	1.50	99	.059	.77	6.53	-4.7	6059E-03	6.584	-7.363
192/1026	1.62	1.77	1.77	99	.126	.03	10.15	-24.0	1297E-02	3.944	-11.006
192/1041	2.24	2.48	2.48	88	.227	.90	13.63	133.5	2339E-02	-1.775	-23.706
192/1056	2.54	2.81	2.81	88	.119	.03	9.05	-905.7	1222E-02	.099	-19.677
192/1111	1.39	1.52	1.52	99	.096	.01	8.03	-11.3	2830E-03	5.699	-3.694
192/1126	1.09	1.64	1.64	99	.113	.02	9.57	-17.0	1154E-02	4.030	-10.262
192/1141	2.08	2.28	2.28	99	.211	.09	13.11	445.9	2166E-02	-4.74	-10.403
192/1156	3.09	3.41	3.41	99	.123	.03	10.03	37.7	1262E-02	-2.504	-23.772
192/1211	3.58	3.95	3.95	99	.107	.02	9.30	20.0	1108E-02	-3.717	-25.147
192/1226	*****	*****	*****	99	.065	.77	7.29	*****	6695E-03	*****	*****
192/1241	3.55	3.91	3.91	98	.056	.76	6.00	-359.9	5026E-03	.074	-10.776
192/1256	3.68	4.03	4.03	97	.094	.00	8.76	19.4	9676E-03	-3.251	-22.005
192/1311	3.56	3.87	3.87	95	.098	.01	8.90	22.0	1016E-02	-5.082	-20.633
192/1326	3.28	3.53	3.53	94	.129	.03	10.29	22.9	1334E-02	-3.655	-10.456
192/1341	3.39	3.63	3.63	92	.274	.92	14.97	31.3	2024E-02	-10.050	-23.053
192/1356	3.83	4.13	4.13	93	.432	.99	18.01	34.0	4459E-02	-17.901	-36.942
192/1411	3.40	3.72	3.72	93	.501	1.01	20.26	46.1	5170E-02	-16.095	-32.009

15 MINUTE AVERAGES: PARCEL DATA

DATE, Z	FA-TW degC	VA-TW degC	RH %	TAU d/cm**2	FD X10-3	HA cm/sec	L m	ZB cm	H m/m**2	E m/m**2
192/1426	3.20	3.40	97	.300	.97	17.05	43.9	3997E-02	-12.072	-23.709
192/1441	3.20	3.30	90	.311	.94	15.95	30.1	3207E-02	-9.997	-19.336
192/1550	3.02	3.20	92	.205	.93	15.22	41.5	2930E-02	-0.041	-19.302
192/1613	3.05	3.24	92	.376	.97	17.53	47.4	3020E-02	-10.644	-21.743
192/1620	3.10	3.30	93	.372	.96	17.40	43.3	3033E-02	-11.526	-21.905
192/1643	2.99	3.10	92	.205	.93	15.27	42.2	2936E-02	-7.092	-10.719
192/1658	3.05	3.25	92	.274	.92	14.97	39.6	2023E-02	-7.930	-19.710
192/1726	3.01	3.21	92	.244	.91	14.14	59.1	2518E-02	-6.769	-19.154
192/1741	*****	*****	**	*****	*****	*****	*****	*****	*****	*****
192/1756	4.01	4.27	90	.235	.90	13.30	20.4	2427E-02	-12.290	-25.240
192/1811	3.94	4.26	93	.061	.77	7.09	20.7	6326E-03	-1.609	-16.674
192/1826	3.02	4.12	93	.052	.76	6.54	74.5	5396E-03	-3.52	-14.656
192/1841	4.24	4.56	92	.054	.76	6.64	15.5	5540E-03	-1.773	-16.220
192/1856	4.21	4.49	89	.055	.76	6.75	15.3	5741E-03	-1.009	-13.779
192/1911	3.51	3.72	90	.023	.71	4.33	-1.9	2360E-03	3.913	-7.052
192/1926	3.50	3.72	91	.024	.72	4.46	-2.2	2505E-03	3.741	-7.610
192/1941	3.62	3.94	95	.012	.60	3.09	-5	1206E-03	5.686	-7.912
192/1956	3.38	3.60	92	.019	.70	3.93	-1.3	1994E-03	4.714	-7.037
192/2011	3.59	3.06	93	.029	.72	4.07	-3.7	2203E-03	2.900	-10.241
192/2026	3.56	3.02	92	.072	.70	7.67	34.6	2409E-03	-1.221	-14.952
192/2041	3.83	4.06	09	.006	.00	0.30	16.9	0057E-03	-3.264	-33.753
192/2056	3.73	4.00	92	.032	.73	5.09	-5.6	3261E-03	2.214	-14.299
192/2111	3.50	3.09	95	.027	.72	4.72	-3.1	2010E-03	3.147	-11.422
192/2126	3.02	4.18	96	.054	.76	6.67	40.5	5517E-03	-5.74	-17.963
192/2141	3.04	4.20	96	.010	.70	3.09	-1.4	1907E-03	3.970	-11.293
192/2156	3.56	3.94	99	.025	.72	4.52	-2.5	2524E-03	3.500	-13.509
192/2211	3.35	3.73	**	.020	.72	4.77	-2.0	2066E-03	3.589	-14.427
192/2226	3.57	3.99	**	.039	.74	5.63	-9.5	3990E-03	1.765	-11.059
192/2241	3.55	3.90	**	.092	.00	0.72	23.0	9579E-03	-2.697	-27.776
192/2256	3.91	4.37	**	.060	.00	0.52	15.3	9153E-03	-3.702	-29.161
192/2311	3.03	4.26	**	.147	.05	11.00	17.3	1523E-02	-7.192	-34.083
192/2326	3.27	3.62	99	.371	.96	17.44	41.0	3030E-02	-12.109	-41.697
192/2341	3.59	3.97	99	.171	.06	11.05	21.7	1269E-02	-7.166	-32.073
192/2356	3.29	3.64	99	.320	.94	16.20	36.7	3306E-02	-10.050	-39.067
193/0011	3.24	3.58	99	.203	.93	15.22	35.3	2939E-02	-9.367	-35.941
193/0026	2.03	3.13	99	.116	.02	9.76	00.9	1201E-02	-1.077	-21.100
193/0041	2.76	3.05	99	.240	.91	14.24	50.1	2553E-02	-5.394	-20.091
193/0056	2.69	2.97	99	.167	.06	11.69	60.7	1723E-02	-2.466	-23.423
193/0111	1.00	1.17	90	.020	.71	4.07	-7	2091E-03	9.025	-3.179
193/0126	.20	.29	90	.310	.94	16.13	-42.6	3280E-02	9.239	-5.30
193/0141	.03	.01	97	.137	.04	10.59	-10.1	1412E-02	10.900	3.473
193/0156	-.97	-1.11	99	.260	.91	14.60	-17.1	2604E-02	17.071	14.700
193/0211	.34	.37	99	.434	.99	10.03	-73.3	4460E-02	0.531	-2.977
193/0226	1.23	1.35	99	.443	.99	19.00	-370.0	4546E-02	1.732	-14.976
193/0241	1.22	1.34	99	.430	.99	10.70	-321.0	4407E-02	3.910	-14.394
193/0256	.52	.57	99	.291	.93	15.41	-43.0	2991E-02	7.020	-4.720
193/0311	.74	.02	99	.333	.95	16.50	-69.1	3429E-02	6.000	-0.300
193/0326	.96	1.06	**	.307	.94	15.06	-77.5	3160E-02	4.021	-11.253

15 MINUTE ADP-POLYMER PARADIGMS

OTC Z	TA-TW degC	TVA-TW degF	RH %	TAI d/cent	LD x10-3	U m/sec	I m	Z0 m	H u/m	E u/m
193/0341	2.29	2.54	**	251	91	14.34	105.0	2.991E-02	-2.630	-25.306
193/0356	2.75	3.05	**	296	91	14.19	50.5	2.956E-02	-5.303	-29.767
193/0411	2.02	3.12	**	343	95	16.76	53.5	3.530E-02	-0.247	-45.230
193/0426	3.22	3.57	**	262	92	15.69	35.6	2.990E-02	-9.296	-37.560
193/0441	3.33	3.70	**	376	95	16.35	36.2	3.369E-02	-11.303	-41.591
193/0456	3.75	4.17	**	320	90	13.69	75.7	2.336E-02	-10.566	-40.083
193/0511	3.70	4.11	**	270	92	15.10	76.6	2.675E-02	-12.094	-43.530
193/0526	3.50	3.98	**	255	91	14.47	76.0	2.637E-02	-10.591	-40.380
193/0541	3.65	4.06	**	293	93	15.51	70.3	3.030E-02	-12.354	-43.726
193/0556	3.69	4.10	**	332	95	16.51	30.4	3.432E-02	-13.065	-45.542
193/0611	3.97	4.42	**	457	1.00	19.37	33.6	4.729E-02	-19.677	-52.039
193/0626	4.04	4.49	**	307	97	17.02	29.4	4.002E-02	-10.053	-35.476
193/0641	3.02	4.24	**	212	09	13.19	21.0	2.193E-02	-10.226	-39.941
193/0656	3.84	4.27	**	242	90	14.00	22.5	2.426E-02	-11.594	-42.903
193/0711	4.53	5.05	**	301	93	15.74	20.0	3.214E-02	-10.272	-46.364
193/0726	4.59	5.13	**	345	95	16.66	21.9	3.501E-02	-20.476	-61.163
193/0741	4.66	5.24	**	343	95	16.00	21.3	3.357E-02	-20.050	-65.909
193/0756	4.17	4.60	**	200	93	15.59	22.0	2.905E-02	-15.405	-53.552
193/0811	3.92	4.40	**	201	92	15.26	21.2	2.909E-02	-13.509	-53.100
193/0826	3.04	4.31	**	200	92	15.17	21.9	2.900E-02	-13.110	-49.676
193/0841	4.02	4.51	**	299	93	15.67	21.2	3.095E-02	-14.907	-53.530
193/0856	3.64	4.09	**	438	99	18.96	33.4	4.591E-02	-16.606	-50.063
193/0911	3.52	3.96	**	546	1.03	21.17	40.6	5.646E-02	-10.289	-61.714
193/0926	3.94	4.42	**	447	99	19.16	33.4	4.677E-02	-19.159	-61.495
193/0941	3.79	4.24	**	581	1.04	21.06	45.0	6.019E-02	-21.555	-64.474
193/0956	4.04	4.51	**	661	1.06	23.31	46.0	6.017E-02	-25.525	-71.055
193/1011	4.24	4.74	**	564	1.03	21.53	37.9	5.040E-02	-24.705	-73.031
193/1026	3.33	3.75	**	522	1.02	20.88	51.2	5.300E-02	-16.174	-52.534
193/1041	3.03	3.40	**	540	1.02	23.02	61.9	5.567E-02	-14.064	-52.334
193/1056	2.99	3.36	**	693	1.07	23.62	76.0	7.147E-02	-16.467	-52.903
193/1111	3.40	3.81	**	607	1.07	23.73	62.3	7.091E-02	-20.070	-63.210
193/1126	3.61	4.02	**	694	1.07	23.66	57.5	7.172E-02	-22.130	-63.410
193/1141	3.26	3.62	**	575	1.04	21.71	57.5	5.930E-02	-16.623	-52.293
193/1156	3.05	3.38	**	625	1.05	22.63	60.7	6.451E-02	-15.305	-50.184
193/1211	2.46	2.40	**	*****	*****	*****	*****	*****	*****	*****
193/1226	3.22	3.25	**	*****	*****	*****	*****	*****	*****	*****
193/1241	3.05	4.30	**	651	1.06	23.11	49.3	6.779E-02	-23.455	-60.070
193/1256	4.11	4.60	**	981	1.14	20.59	66.0	1.016E-01	-32.454	-60.043
193/1311	4.37	4.90	**	1.009	1.16	22.94	62.5	1.129E-01	-37.192	-92.514
193/1326	4.14	4.64	**	806	1.12	26.99	59.2	9.175E-02	-31.032	-104.595
193/1341	3.99	4.54	**	720	1.08	24.32	63.4	7.452E-02	-26.207	-107.399
193/1356	3.05	4.43	**	797	1.10	25.59	59.3	8.246E-02	-26.437	-95.106
193/1411	4.11	4.66	**	785	1.09	25.40	53.4	1.012E-01	-20.720	-90.260
193/1426	4.32	4.07	**	826	1.10	26.06	52.4	1.056E-02	-31.602	-92.172
193/1441	4.67	5.25	**	751	1.09	24.00	43.3	7.796E-02	-33.294	-92.896
193/1456	5.57	6.23	**	219	09	13.46	11.2	2.204E-02	-20.451	-62.070
193/1511	5.64	6.30	**	230	90	13.79	11.4	2.394E-02	-21.466	-63.673
193/1632	4.66	5.18	99	805	1.10	25.77	46.5	1.165E-02	-34.413	-105.765

15 MINUTE AVERAGES. PARAMETERS

DATE	Z	1A-1W deg	10A-10W deg	RU Z	TOT d/cm ²	CO X10-3	U ₀ cm/sec	L m	ZH m	U m/sec	E m/sec
193/1647		6.75	7.30	07	652	1.05	27.74	22.9	6547E-02	40.043	-70.301
193/1732		7.34	7.87	03	340	.96	17.02	11.7	5651E-02	-57.492	-57.950
193/1747	*****		*****	16	245	.09	13.34	*****	2242E-02	*****	*****
193/1822		7.49	7.98	00	206	.93	15.34	9.5	5002E-02	-36.245	-42.137
193/1851		7.45	7.91	79	100	.00	12.53	6.5	1973E-02	-20.250	-30.454
193/1951		7.60	8.13	01	259	.92	14.69	0.5	2217E-02	-34.909	-50.923
193/2041		8.43	9.13	04	276	.92	15.10	7.9	2902E-02	-41.240	-70.504
193/2107		7.00	8.46	05	250	.91	14.43	7.9	2623E-02	-35.322	-63.254
193/2143		7.01	8.52	00	333	.95	16.67	10.4	3497E-02	-43.534	-70.306
193/2150		7.40	8.20	90	440	.99	10.94	14.1	4510E-02	-45.034	-031.039
193/2213		6.34	6.98	92	209	.09	13.10	9.0	2189E-02	-23.923	-57.341
193/2220		5.49	6.05	93	325	.95	16.46	16.3	3413E-02	-25.606	-61.063
193/2243		4.27	4.71	94	336	.95	16.72	24.5	3521E-02	-17.030	-40.635
193/2250		4.46	4.95	95	400	.90	10.49	22.6	4202E-02	-21.721	-50.077
193/2313		4.19	4.67	95	350	.96	17.28	26.6	3751E-02	-10.162	-53.327
193/2320		4.20	4.67	96	407	.90	10.41	29.6	4270E-02	-19.690	-57.900
193/2343		3.52	3.93	96	457	1.00	19.54	43.3	4801E-02	-16.066	-53.087
193/2350		3.91	4.39	97	145	.05	10.99	16.0	1522E-02	-7.392	-37.104
194/0013		3.25	3.67	97	020	.71	4.03	-3.4	2102E-03	4.704	-42.973
194/0035		2.10	2.37	90	412	.98	10.57	13.2	4344E-02	-4.492	-32.765
194/0050		3.63	4.14	99	306	.97	17.96	36.1	4065E-02	-14.920	-59.225
194/0105		4.65	5.27	99	409	.90	10.40	25.5	4301E-02	-23.097	-75.170
194/0120		4.49	5.11	99	577	1.04	21.95	36.5	4603E-02	-27.061	-05.450
194/0135		2.76	3.16	99	300	.94	16.04	55.0	3242E-02	-7.016	-42.231
194/0150		1.74	1.99	99	299	.94	15.02	160.0	3151E-02	-2.30	-26.276
194/0205		2.29	2.62	99	370	.97	17.50	50.4	3094E-02	-5.160	-31.270
194/0220		3.34	3.83	**	394	.90	10.15	42.3	4351E-02	-13.199	-57.036
194/0252		3.54	4.02	**	420	.99	10.70	40.0	4405E-02	-15.277	-59.350
194/0323		6.11	6.87	**	017	1.10	26.05	33.9	0546E-02	-40.700	-123.441
194/0338		6.06	6.80	**	600	1.04	22.30	25.2	6264E-02	-41.206	-107.024
194/0353		5.49	6.16	**	455	1.00	19.40	21.9	4743E-02	-31.249	-05.705
194/0416		5.51	6.19	**	692	1.07	23.93	32.5	7213E-02	-39.406	-103.424
194/0431		5.63	6.31	**	506	1.04	22.01	26.9	6102E-02	-37.060	-97.370
194/0446		5.94	6.67	**	157	.06	11.40	7.7	1637E-02	-17.934	-59.200
194/0501		6.75	7.60	**	371	.97	17.57	13.9	3009E-02	-36.590	-99.260
194/0516		7.11	8.01	**	300	.94	16.00	10.9	5226E-02	-35.251	-97.351
194/0531		6.93	7.81	**	393	.97	10.09	14.2	4121E-02	-39.071	-104.747
194/0546		6.13	6.88	**	451	1.00	19.34	10.0	4214E-02	-35.973	-95.019
194/0601		4.74	5.29	**	492	1.01	20.14	20.6	5111E-02	-26.690	-73.545
194/0616		5.46	6.11	**	003	1.12	27.02	41.7	9190E-02	-44.233	-109.441
194/0631		6.14	6.88	**	1.040	1.15	29.36	42.0	1006E-01	-55.292	-132.1129
194/0647		6.21	6.96	**	092	1.12	27.20	36.2	9310E-02	-51.994	-136.420
194/0702		6.97	7.82	99	734	1.00	24.71	26.0	7691E-02	-54.103	-133.113
194/0717		7.34	8.25	99	524	1.02	20.90	17.5	5501E-02	-40.739	-123.219
194/0732		6.90	7.04	99	394	.98	10.10	14.0	4327E-02	-39.444	-102.935
194/0747		6.47	7.26	99	404	.98	10.32	15.0	4326E-02	-36.301	-95.194
194/0802		6.42	7.20	99	460	1.00	19.70	10.4	4090E-02	-30.926	-100.103
194/0817		6.59	7.39	99	552	1.03	21.41	20.9	5772E-02	-43.055	-110.376

15 MINUTE AVERAGES PARAGETERS

DWG. Z	TA-TW deg.	TO-TW deg.	RU Z	TAH d/cm**2	ED X10-3	HE cm/sec	L m	H m/m**2	F m/m**2
194/0032	6.67	7.48	99	.513	1.02	20.61	19.1	-42.750	-100.336
194/0047	6.38	7.14	99	.351	.96	17.07	14.1	-32.919	-67.910
194/0062	6.14	6.08	99	.224	.93	15.62	12.6	-20.241	-70.234
194/0017	6.11	6.05	99	.212	.89	13.27	9.5	-22.975	-67.690
194/0033	6.11	6.05	99	.219	.09	13.50	9.0	-23.460	-69.274
194/0047	6.61	7.41	99	.302	.94	15.05	11.7	-31.667	-66.146
194/0002	6.25	7.01	99	.426	.99	16.06	17.4	-35.743	-93.369
194/0017	6.33	7.10	99	.406	1.01	20.00	19.4	-39.002	-100.312
194/0032	6.21	6.96	99	.365	.96	17.40	15.2	-32.472	-86.201
194/0047	6.01	6.73	99	.480	1.01	19.94	20.5	-36.246	-95.904
194/0102	6.11	6.05	99	.504	1.04	22.02	21.3	-41.136	-104.105
194/0117	5.62	6.29	99	.539	1.03	21.12	24.9	-35.409	-91.562
194/0132	5.71	6.39	99	.562	1.03	21.30	25.4	-36.939	-95.002
194/0147	5.91	6.62	99	.300	.97	17.95	17.1	-31.510	-84.614
194/0202	6.10	6.03	99	.433	.97	16.95	10.2	-34.877	-91.561
194/0217	5.67	6.34	99	.491	1.01	20.17	22.6	-33.965	-103.690
194/0232	5.71	6.39	99	.365	.96	17.40	16.9	-29.049	-70.506
194/0247	5.55	6.20	99	.270	.92	14.95	13.5	-23.237	-66.690
194/0302	5.01	5.59	99	.164	.06	11.64	10.6	-13.096	-48.017
194/0317	5.29	5.91	99	.001	.79	0.10	6.2	-0.230	-37.945
194/0332	4.51	5.02	99	.099	.01	9.02	9.9	-6.910	-34.019
194/0347	4.46	4.97	99	.171	.86	11.89	13.6	-11.603	-43.123
194/0402	5.22	5.03	99	.081	.79	0.19	6.4	-0.007	-36.971
194/0417	5.20	5.00	99	.069	.70	7.57	6.1	-6.612	-34.279
194/0432	4.51	5.03	99	.019	.70	4.00	-2.4	2.509	-16.335
194/0447	4.03	5.39	99	.026	.72	4.63	-16.4	.566	-20.146
194/0502	5.17	5.78	99	.050	.77	6.93	6.0	-5.199	-31.461
194/0517	5.18	5.79	99	.025	.72	4.53	-38.6	.023	-21.302
194/0532	5.30	5.92	99	.009	.67	2.67	-4	4.175	-13.205
194/0547	5.67	6.34	99	.042	.75	5.07	4.1	-4.272	-22.993
194/0602	5.92	6.63	99	.007	.67	2.37	-3	4.105	-13.460
194/0617	5.88	6.58	99	.042	.75	5.87	3.9	-4.019	-31.255
194/0632	6.00	6.72	99	.064	.78	7.31	4.2	-0.695	-30.005
194/0647	6.01	6.72	99	.061	.77	7.10	4.1	-0.235	-37.547
194/0702	6.70	7.49	98	.069	.70	7.50	3.5	-11.606	-44.561
194/0717	6.70	7.48	97	.040	.76	6.34	2.9	-0.207	-57.033
194/0732	6.34	7.03	96	.021	.71	4.21	4.6	-1.523	-22.453
194/0747	6.09	6.71	94	.013	.69	3.27	-2.2	1.490	-16.002
194/0802	5.99	6.58	93	.016	.66	2.25	-2	4.457	-10.849
194/0817	6.13	6.72	93	.014	.69	3.37	-3.1	1.168	-15.543
194/0832	6.27	6.06	92	.027	.72	4.77	3.5	-2.977	-21.091
194/0847	6.37	6.97	92	.005	.66	1.94	-1	4.970	-9.362
194/0902	6.43	7.03	91	.006	.66	2.16	-2	4.247	-10.325
194/0917	6.50	7.06	89	.007	.67	2.44	-9	3.320	-10.020
194/0932	6.50	7.01	87	.006	.67	2.31	-3	3.713	-9.195
194/0947	7.19	7.73	84	.008	.67	2.53	-7	2.195	-10.720
194/2002	7.70	8.24	81	.015	.69	3.55	2.1	-1.979	-14.464
194/2017	7.20	7.63	79	.005	.66	2.01	-2	3.920	-6.614

15. GROUP 600 PAGES PARAPHERS

DTG, Z	1A-1W degC	10A-10W degC	RH %	Q/CMHAP	Q/CMHAP X10-3	Wk cm/sec	I m	Z0 cm	H m/mmm	L m/mmm
194/2032	6.93	7.34	79	.003	.65	1.71	-1	3569F-04	5.167	-5.335
194/2047	5.42	5.66	79	.003	.65	1.40	-0	2747-04	6.997	-2.550
194/2102	4.07	5.02	70	.002	.64	1.30	-0	2403F-04	7.613	-4.399
194/2117	5.00	5.24	77	.002	.61	1.20	7.0	1070F-02	-9.444	-9.204
194/2132	5.67	5.09	77	.133	.04	10.52	7.5	1406E-02	-14.226	-14.371
194/2147	7.47	7.00	75	.169	.06	11.90	5.9	1203F-02	-26.539	-31.145
194/2202	8.30	8.05	75	.107	.00	12.50	5.6	1275E-02	-33.006	-30.747
194/2217	7.60	0.01	76	.119	.03	9.60	4.3	1254E-02	-21.798	-27.500
194/2232	7.67	0.12	77	.250	.92	14.62	0.4	2731E-02	-35.264	-42.700
194/2247	6.90	7.29	78	.212	.09	13.29	0.1	2224E-02	-27.239	-33.552
194/2302	5.11	5.30	78	.159	.06	11.54	10.2	1677E-02	-14.066	-13.770
194/2317	4.17	4.25	79	.255	.91	14.00	20.6	2675E-02	-14.083	-5.699
194/2332	4.29	4.43	81	.136	.04	10.62	13.0	1421E-02	-0.601	-0.950
194/2347	5.64	5.90	83	.202	.60	12.95	10.3	2113E-02	-19.674	-29.044
195/0002	6.12	6.55	85	.290	.93	15.53	12.6	3637E-02	-27.901	-43.005
195/0017	6.35	6.84	86	.203	.08	12.98	0.7	2122E-02	-23.592	-43.051
195/0032	6.53	7.06	87	.167	.06	11.76	7.0	1744E-02	-21.673	-43.033
195/0047	6.17	6.67	88	.209	.09	13.17	9.3	2100E-02	-23.082	-45.260
195/0102	5.38	5.83	89	.187	.08	12.46	10.4	1957E-02	-17.341	-30.233
195/0117	3.70	3.97	90	.278	.92	15.17	27.0	2900E-02	-12.005	-27.294
195/0132	3.04	3.25	91	.132	.04	10.45	39.1	1377E-02	-2.736	-14.061
195/0147	1.79	1.05	91	.130	.00	12.00	-143.2	2063E-02	1.363	-3.563
195/0202	3.20	3.53	92	.204	.09	13.00	29.6	2127E-02	-6.944	-22.007
195/0232	2.34	2.50	93	.165	.06	11.66	11.6	1713E-02	-10.156	-29.347
195/0247	3.52	3.02	94	.072	.69	3.16	-4	1256E-03	7.479	-3.651
195/0303	3.70	4.03	95	.130	.04	10.36	10.5	1352E-02	-5.619	-24.713
195/0318	3.54	3.86	96	.081	.79	0.10	27.3	8422E-03	-1.076	-19.689
195/0333	3.75	4.11	96	.125	.03	10.15	17.6	1297E-02	-5.553	-26.175
195/0348	3.40	3.81	96	.087	.80	0.45	27.4	9005E-03	-2.064	-20.323
195/0403	3.46	3.79	96	.100	.01	9.05	24.8	1031E-02	-2.799	-21.510
195/0410	3.75	4.11	96	.106	.02	9.33	17.1	1097E-02	-4.383	-24.649
195/0433	3.91	4.29	97	.135	.04	10.52	15.9	1394E-02	-6.840	-20.907
195/0448	3.64	3.90	97	.098	.01	6.96	20.0	1011E-02	-3.362	-23.002
195/0503	3.23	3.53	97	.121	.03	9.96	30.5	1251E-02	-3.040	-21.070
195/0510	2.25	2.44	97	.175	.07	11.95	362.1	1000E-02	-4.442	-15.937
195/0533	1.68	1.81	97	.224	.09	13.52	-154.6	2302E-02	1.497	-11.721
195/0540	1.04	1.10	96	.169	.06	11.71	-25.5	1729E-02	5.903	-4.305
195/0603	1.38	1.47	97	.120	.03	9.96	-17.6	1234E-02	5.150	-6.449
195/0610	1.29	1.30	97	.124	.03	10.06	-17.6	1276E-02	5.432	-5.910
195/0633	.31	.29	97	.198	.08	12.71	-20.2	2034E-02	9.497	2.091
195/0640	-1.18	-1.25	97	.171	.06	11.02	-12.0	1755E-02	12.006	6.393
195/0703	.04	-1.00	97	.203	.92	15.20	-50.3	2912E-02	10.858	5.013
195/0710	.44	.44	97	.315	.94	16.05	-47.2	3245E-02	8.200	-1.104
195/0733	.98	.95	97	.398	.97	18.04	-120.4	4099E-02	4.560	-6.369
195/0740	1.80	1.95	97	.359	.96	17.14	316.4	3699E-02	-1.490	-17.766
195/0803	1.90	2.07	97	.488	1.01	19.99	103.9	5033E-02	-4.067	-21.450
195/0010	2.72	2.97	97	.409	.98	10.30	63.9	4220E-02	-0.983	-51.478

4.5 MIQUEL AVERROES: PAPAFIERES

DTG-Z	TA-TW degC	TW-TW degC	RH Z	d/cm ²	LD X10-3	DA cm/sec	t m	ZH m	H m/m ²	E m/m ²
195/0833	*****	*****	97	.216	.09	13.26	*****	2215E-02	*****	*****
195/0848	*****	*****	97	.218	.89	13.31	*****	2231E-02	*****	*****
195/0903	*****	*****	96	.331	.95	16.41	*****	3392E-02	*****	*****
195/0918	*****	*****	96	.229	.90	13.85	*****	2336E-02	*****	*****
195/0933	*****	*****	96	.250	.94	14.58	*****	2650E-02	*****	*****
195/0948	*****	*****	96	.246	.91	14.16	*****	2627E-02	*****	*****
195/1003	*****	*****	96	.224	.89	13.53	*****	2300E-02	*****	*****
195/1018	*****	*****	96	.226	.94	16.31	*****	3036E-02	*****	*****
195/1033	*****	*****	96	.326	.94	16.31	*****	3350E-02	*****	*****
195/1048	*****	*****	96	.367	.96	17.27	*****	3759E-02	*****	*****
195/1103	*****	*****	96	.373	.96	17.43	*****	3828E-02	*****	*****
195/1118	*****	*****	96	.474	1.00	19.63	*****	4960E-02	*****	*****
195/1133	*****	*****	96	.331	.95	16.42	*****	3395E-02	*****	*****
195/1149	*****	*****	96	.411	.98	18.28	*****	4211E-02	*****	*****
195/1204	*****	*****	95	.726	1.08	20.32	*****	7453E-02	*****	*****
195/1219	*****	*****	94	.523	1.02	20.66	*****	5375E-02	*****	*****
195/1305	*****	*****	89	.413	.98	18.36	*****	4237E-02	*****	*****
195/1320	*****	*****	88	.393	.97	17.92	*****	4045E-02	*****	*****
195/1335	4.15	4.20	82	.232	.90	13.81	19.0	2901E-02	-12.970	-11.202
195/1350	4.00	4.04	70	.085	.88	8.33	14.2	3074E-03	-3.810	-1.202
195/1405	3.95	3.94	75	.116	.82	9.75	14.8	3190E-02	-5.857	-2.451
195/1420	4.07	4.04	73	.319	.94	16.20	24.9	3406E-02	-16.036	-6.400
195/1435	4.29	4.26	73	.273	.92	14.97	20.2	2922E-02	-35.564	-5.383
195/1450	4.47	4.46	72	.203	.88	12.92	15.1	2144E-02	-13.433	-3.709
195/1505	4.52	4.58	72	.223	.90	13.54	15.9	2331E-02	-14.693	-4.536
195/1520	4.39	4.36	72	.210	.89	13.39	16.4	2259E-02	-13.719	-5.432
195/1535	*****	*****	88	*****	.07	11.96	*****	1003E-02	*****	*****
195/1550	4.22	4.18	72	.210	.89	13.14	17.2	2176E-02	-12.587	-5.987
195/1605	4.33	4.30	72	.157	.85	11.35	13.6	1623E-02	-10.106	4.577
195/1620	4.58	4.56	72	.110	.83	9.84	10.3	1219E-02	-8.667	2.707
195/1635	4.48	4.44	71	.165	.86	11.65	13.1	1711E-02	-11.344	5.188
195/1650	4.35	4.30	71	.281	.88	12.87	15.8	2086E-02	-12.656	7.120
195/1705	3.72	3.63	72	.230	.90	13.98	23.8	2462E-02	-10.744	10.633
195/1720	3.40	3.30	74	.067	.78	7.41	128.2	6911E-03	-.297	6.459
195/1735	3.92	3.89	74	.218	.89	13.39	20.3	2258E-02	-14.103	4.965
195/1750	4.17	4.15	74	.031	.73	5.84	-9.5	3196E-03	1.261	1.532
195/1805	3.47	3.37	73	.073	.78	7.76	42.3	2784E-03	-1.036	7.002
195/1820	2.99	2.84	73	.052	.76	6.55	-12.5	5410E-03	2.110	9.058
195/1835	3.08	2.92	73	.111	.82	9.54	43.9	1147E-02	-1.655	12.607
195/1850	2.54	2.33	73	.112	.82	9.61	-24.7	1162E-02	-.336	15.809
195/1905	2.13	1.87	73	.199	.88	12.79	40.4	2060E-02	-.484	25.918
195/1920	2.46	2.24	73	.096	.81	8.98	-47.7	9969E-03	1.382	16.178
195/1935	*****	*****	79	.180	.87	12.11	*****	1847E-02	*****	*****
195/1950	3.14	2.95	72	.220	.89	13.58	33.2	2296E-02	-6.734	19.797
195/2005	4.21	4.13	71	.188	.87	12.27	15.8	1881E-02	-10.810	9.262
195/2020	3.70	3.56	71	.139	.84	10.73	19.0	1451E-02	-6.114	12.920
195/2035	2.41	2.16	73	.144	.85	10.90	40.9	1498E-02	-.297	21.332
195/2050	2.25	2.08	73	.107	.82	7.41	-49.4	1314E-02	-756	18.566

15 MINUTE AVERAGES. PARABOLICS

DATE	TA-10 degC	TA-10W degC	RH %	d/cm ³ x 10 ⁻³	TD cm/sec	1 m	20 cm	H m/m ²	I m/m ²
195/2105	4.05	4.01	73	.141	84	10.70	35.8	346.8E-02	5.335
195/2120	3.44	3.35	73	.196	108	12.67	25.5	200.9E-02	10.794
195/2135	3.21	3.11	74	.195	100	12.65	30.7	203.6E-02	10.713
195/2150	2.00	2.67	75	.190	100	12.74	32.6	204.1E-02	13.590
195/2205	2.05	1.05	76	.213	.109	13.54	40.4	230.1E-02	20.661
195/2220	2.04	2.74	77	.215	.109	13.70	45.7	232.0E-02	11.552
195/2235	1.70	1.48	77	.230	.90	13.76	19.3	230.0E-02	23.573
195/2250	2.07	1.09	77	.232	.90	13.95	24.2	245.4E-02	12.810
195/2305	1.17	.107	77	.240	.91	14.20	66.5	257.1E-02	31.341
195/2320	1.72	1.48	77	.237	.90	13.96	25.3	245.6E-02	25.090
195/2335	2.74	2.63	76	.169	.106	11.70	51.0	174.9E-02	11.062
195/2350	1.36	1.08	77	.199	.100	12.79	52.9	206.0E-02	27.166
196/0005	1.43	1.16	77	.181	.107	12.79	46.8	182.3E-02	3.631
196/0020	1.11	.101	77	.207	.109	13.04	42.2	214.4E-02	29.616
196/0035	2.10	2.00	77	.247	.91	14.25	143.5	255.0E-02	19.443
196/0050	1.90	1.70	77	.277	.92	15.10	379.2	302.1E-02	23.075
196/0105	1.47	1.22	77	.239	.90	13.74	95.4	237.9E-02	26.050
196/0121	-.33	-.02	78	.240	.91	14.29	21.1	257.3E-02	50.711
196/0136	-2.20	-3.06	70	.144	1.11	26.40	51.2	107.9E-02	33.690
196/0151	-1.79	-2.53	70	.196	.100	12.22	9.5	204.0E-02	20.663
196/0206	-1.41	-2.08	70	.171	.106	11.90	41.7	170.5E-02	10.176
196/0221	-1.50	-2.19	70	.173	.107	11.92	41.6	100.5E-02	10.650
196/0236	-1.50	-2.19	70	.160	.106	11.50	7.0	165.5E-02	10.355
196/0300	3.08	3.36	95	.658	1.86	23.29	71.0	603.5E-02	-16.653
196/0323	4.35	4.79	95	.405	.99	12.10	22.0	46.3E-02	-22.157
196/0330	5.00	5.60	95	.601	1.07	23.75	35.6	718.0E-02	-35.207
196/0353	5.02	6.43	95	.632	1.05	22.90	27.0	66.0E-02	-40.314
196/0400	6.64	7.35	95	.343	.95	16.00	13.1	35.9E-02	-34.208
196/0423	5.44	5.99	95	.610	1.05	22.46	22.2	65.5E-02	-36.310
196/0430	4.00	5.27	95	.637	1.05	22.92	35.0	66.2E-02	-31.500
196/0453	4.41	4.82	95	.687	1.07	23.79	43.1	71.2E-02	-29.254
196/1008	4.53	4.96	95	.744	1.08	24.77	44.0	77.2E-02	-31.751
196/1023	4.73	5.19	95	.642	1.06	23.01	36.7	66.7E-02	-31.044
196/1030	4.29	4.69	95	.726	1.00	24.45	47.0	75.3E-02	-29.117
196/1053	3.56	3.87	95	.767	1.09	25.10	64.2	79.5E-02	-23.053
196/1100	3.31	3.59	95	.158	1.11	26.54	70.0	107.2E-02	-27.214
196/1123	3.60	3.91	95	.295	.93	15.56	22.2	30.5E-02	-12.071
196/1138	3.78	4.12	95	.305	.97	17.79	32.7	39.8E-02	-16.133
196/1153	4.10	4.57	95	.333	.95	16.56	24.7	39.5E-02	-17.160
196/1208	3.43	3.73	95	.607	1.05	22.35	55.8	62.9E-02	-18.742
196/1223	2.92	3.16	94	.760	1.09	25.00	86.9	70.7E-02	-16.830
196/1238	3.13	3.40	95	.782	1.09	25.37	79.8	103.0E-02	-19.160
196/1253	2.65	2.07	95	.600	1.04	22.23	86.3	62.2E-02	-11.912
196/1308	2.83	3.08	95	.476	1.00	19.10	64.9	49.4E-02	-11.217
196/1323	2.63	2.85	95	.430	.99	19.02	71.3	44.6E-02	-8.751
196/1338	2.41	2.59	94	.362	.96	17.26	87.9	37.5E-02	-5.011
196/1354	2.67	2.89	94	.438	.99	18.99	69.4	45.4E-02	-9.237
196/1409	2.66	2.87	94	.419	.90	18.55	60.2	43.7E-02	-0.762

15 HINDLE OVERALLS PARAFLOWES

DEC. Z	TA-1M degC	TVA-1VM degC	RH %	TAU m/sec	CD X10-3	0.8 cm/sec	t s	Z cm	M m/sec	F m/sec
1901/1424	3.25	3.52	94	4.96	.99	1.9 17	47.7	463.10-02	-1.3 017	-3.3 258
1901/1439	4.07	4.40	94	5.25	1.02	2.0 04	37.9	545.4F-02	-2.2 272	-4.2 559
1901/1454	3.00	4.22	94	4.72	1.00	1.7 71	37.1	406.64-02	-1.9 374	-4.3 609
1901/1509	3.99	4.34	94	3.72	.97	3.7 53	29.2	386.04-02	-3.2 270	-4.0 030
1901/1520	3.93	4.77	94	5.03	1.01	2.0 06	33.4	572.11-02	-2.0 573	-4.5 047
1901/1539	3.08	4.24	93	2.94	.91	3.4 10	27.4	275.34-02	-3.4 903	-3.7 072
1901/1554	3.46	3.73	93	2.82	.91	1.9 59	23.0	260.00-02	-9.6 697	-2.6 925
1901/1609	3.95	3.72	93	3.00	.93	3.5 24	37.2	311.04-02	-3.4 275	-2.0 704
1901/1624	3.69	4.00	93	3.60	.96	1.7 22	33.5	375.64-02	-1.4 209	3.5 206
1901/1639	3.07	4.24	93	2.62	.94	3.4 43	23.0	263.40-02	-3.2 400	-3.7 913
1901/1654	3.92	4.25	93	3.49	.96	1.6 97	20.6	362.9F-02	-1.5 900	-3.7 063
1901/1709	3.70	4.10	93	4.46	.99	3.9 16	36.0	462.54-02	-3.2 905	-3.9 293
1901/1724	3.71	4.02	94	4.76	1.00	3.2 29	40.1	493.34-02	-1.0 110	-3.9 030
1901/1739	3.52	3.01	93	5.14	1.02	2.0 57	46.4	533.0F-02	-1.7 571	-3.7 911
1901/1754	3.58	3.67	93	2.65	1.09	2.5 09	63.7	79.50F-02	-2.5 225	-4.5 441
1901/1809	4.15	4.51	93	8.95	1.12	2.7 16	60.1	92.93F-02	-3.1 233	-6.0 316
1901/1824	4.77	5.24	94	9.26	1.13	3.2 65	53.7	96.50F-02	-3.0 256	-2.4 200
1901/1839	5.24	5.74	94	7.46	1.09	2.0 04	37.3	77.79F-02	-3.0 452	-2.7 617
1901/1854	5.42	5.94	93	7.73	1.09	2.5 29	37.0	105.53F-02	-4.0 077	-0.1 937
1901/1909	5.56	6.09	93	6.49	1.06	2.3 39	30.3	67.73F-02	-3.0 547	-2.0 374
1901/1924	5.70	6.33	92	6.76	1.07	2.5 67	30.0	70.53F-02	-4.1 356	-0.1 497
1901/1939	5.91	6.45	92	5.70	1.04	2.4 23	24.7	59.50F-02	-3.0 037	-2.5 357
1901/1954	5.02	5.42	90	7.41	1.00	2.4 74	39.0	77.11F-02	-3.6 320	-6.1 286
1901/2009	5.30	5.72	89	7.94	1.10	2.5 64	39.4	6.00F-02	-4.0 352	-6.5 656
1901/2024	5.05	5.41	88	10.13	1.10	2.5 92	42.5	104.62F-02	-3.0 409	-6.6 943
1901/2039	5.01	5.37	88	8.93	1.12	2.7 15	46.9	92.04F-02	-3.9 077	-3.9 002
1901/2054	4.46	4.73	87	10.41	1.11	2.6 36	51.6	105.23F-02	-3.5 256	-4.3 320
1901/2109	4.07	4.27	86	9.02	1.12	2.7 29	62.4	93.00F-02	-3.0 563	-3.2 673
1901/2124	3.92	4.10	85	1.004	1.15	2.0 03	73.0	104.72F-01	-3.0 727	-3.0 013
1901/2139	4.41	4.74	80	6.79	1.02	2.3 80	43.5	71.34F-02	-2.0 901	-4.6 302
1901/2154	2.92	3.07	80	3.58	.96	1.7 82	52.0	37.77F-02	-9.333	-1.5 400
1901/2209	2.38	2.44	80	6.03	1.05	2.2 47	131.0	63.50F-02	-9.542	-6.609
1901/2224	2.16	2.17	87	6.06	1.05	2.2 55	130.5	64.04F-02	-7.735	1.402
1901/2239	2.67	2.73	86	7.20	1.06	2.4 59	100.7	76.16F-02	-3.3 002	-6.729
1901/2254	3.27	3.39	85	7.49	1.09	2.5 06	74.3	72.11F-02	-1.9 809	-1.5 947
1901/2310	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1901/2325	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1901/2340	4.71	5.03	88	3.45	.95	1.6 07	21.1	35.05F-02	-2.1 262	-3.5 129
1901/2355	4.26	4.52	88	4.77	1.00	1.9 03	32.5	49.52F-02	-2.7 453	-3.5 524
1901/2410	4.50	4.91	90	5.30	1.02	2.1 06	37.6	55.90F-02	-2.6 009	-4.4 905
1901/2425	4.74	5.11	91	5.59	1.03	2.1 47	35.2	50.07F-02	-2.0 233	-5.1 496
1901/2440	4.69	5.08	92	6.10	1.05	2.2 44	35.4	63.41F-02	-2.9 032	-5.2 302
1901/2455	3.94	4.24	92	5.20	1.02	2.0 46	39.9	54.01F-02	-2.1 207	-0.0 635
1901/2470	4.31	4.67	92	7.05	1.07	2.4 11	45.6	73.25F-02	-2.0 100	-5.4 554
1901/2485	3.75	4.05	93	9.01	1.12	2.7 22	69.2	93.36F-02	-2.7 383	-4.2 409
1901/2500	3.40	3.75	93	9.37	1.13	2.7 76	79.7	97.05F-02	-2.5 126	-4.5 004
1901/2515	2.50	2.66	93	6.36	1.05	2.2 02	99.0	65.61F-02	-1.1 161	-2.2 014
1901/2530	2.41	2.55	93	6.44	1.06	2.2 95	109.0	66.37F-02	-1.0 394	-2.0 600

15 MINUTE AVERAGES: PARAMETERS

DATE	TA-TW degC	TA-TW degC	RH %	TAU d/cm ²	CD X10-3	U* cm/sec	U cm	H m	F m
199/0249	2.50	2.43	95	.655	1.06	2.5 14	1.4 0	674.2E-02	-19.505
199/0304	2.47	2.62	93	.712	1.07	2.4 13	1.0 6	7.537E-02	-1.906
199/0319	3.03	3.24	93	.954	1.09	2.4 06	0.0 0	2.707E-02	-5.5 990
199/0334	3.75	4.05	94	.943	1.13	2.2 03	7.2 1	9.759E-02	-52.724
199/0349	3.02	4.20	94	1.080	1.16	2.9 90	0.0 9	1.127E-01	-52.004
199/0405	3.92	4.33	94	.973	1.14	2.0 39	6.0 6	1.000E-01	-59.264
199/0420	4.21	4.50	93	.761	1.02	2.5 03	5.4 5	1.027E-01	-53.504
199/0435	3.45	3.24	94	.593	1.02	2.1 00	4.9 9	9.597E-02	-30.615
199/0450	1.06	1.92	94	.512	1.02	2.0 51	9.3 3	1.390E-02	-4.031
199/0505	1.33	1.44	94	.465	1.00	1.9 52	2.856	1.407E-02	-7.405
199/0520	3.06	3.34	94	.474	1.00	1.9 03	5.6 5	1.954E-02	-5.152
199/0535	3.12	3.41	94	.305	.97	1.7 02	4.7 1	1.402E-02	-1.332
199/0550	3.18	3.40	94	.500	1.04	2.5 11	6.2 4	1.757E-02	-1.6 191
199/0605	4.50	4.96	94	.712	1.08	2.4 32	4.3 9	7.452E-02	-3.0 643
199/0620	5.16	5.60	94	.600	1.04	2.2 31	5.1 0	1.627E-02	-5.5 520
199/0635	5.04	5.53	94	.526	1.02	2.0 02	2.0 2	1.548E-02	-3.0 137
199/0650	4.07	5.54	94	.654	1.06	2.3 26	3.6 1	1.601E-02	-5.2 609
199/0705	4.60	5.02	94	.713	1.00	2.4 26	4.7 3	7.437E-02	-5.1 630
199/0720	4.59	5.01	94	.700	1.07	2.4 03	4.1 5	7.277E-02	-3.1 302
199/0735	4.51	4.92	94	.730	1.08	2.4 52	4.4 1	7.526E-02	-3.1 285
199/0750	4.44	4.84	94	.617	1.05	2.2 55	3.0 5	1.640E-02	-2.7 045
199/0805	4.21	5.14	94	.754	1.09	2.4 94	4.3 1	7.034E-02	-3.3 674
199/0820	4.28	4.60	94	.700	1.08	2.4 20	4.5 4	7.579E-02	-2.0 570
199/0835	4.41	4.03	94	.555	1.03	2.3 42	3.5 6	1.578E-02	-2.5 045
199/0850	4.31	4.22	94	.721	1.09	2.5 20	5.0 0	1.004E-02	-3.0 193
199/0905	4.68	5.14	94	.024	1.11	2.6 12	4.7 6	1.054E-02	-3.5 045
199/0920	5.53	6.07	94	.555	1.14	2.0 11	4.4 5	9.956E-02	-4.6 725
199/0935	4.03	5.20	94	.059	1.11	2.6 61	4.7 3	1.030E-02	-3.7 319
199/0950	4.95	5.41	94	.961	1.14	2.0 16	5.1 3	1.000E-01	-9.0 010
199/1005	4.62	5.06	93	1.245	1.20	3.2 11	7.2 6	1.229E-01	-4.2 607
199/1020	4.53	4.97	93	.918	1.13	2.7 59	5.5 3	9.590E-02	-3.5 524
199/1035	4.43	4.06	93	.703	1.10	2.5 49	4.0 9	1.033E-02	-3.1 655
199/1051	4.25	4.65	93	.967	1.14	2.0 32	6.3 4	1.010E-01	-5.5 520
199/1106	4.36	4.70	93	.900	1.14	2.0 53	6.3 9	1.024E-01	-3.5 020
199/1121	4.35	4.76	93	.908	1.13	2.7 45	5.7 9	9.493E-02	-5.3 445
199/1136	4.04	5.31	93	.402	1.01	2.0 02	2.7 7	1.504E-02	-2.7 010
199/1151	4.05	5.33	93	1.250	1.20	3.2 33	6.9 4	1.317E-01	-4.5 570
199/1206	4.53	4.97	93	1.297	1.21	3.2 03	7.7 7	1.356E-01	-4.2 520
199/1221	4.08	4.45	93	1.367	1.22	3.3 68	9.3 6	1.429E-01	-4.8 175
199/1236	5.03	5.52	93	1.906	1.32	4.0 61	10.5 6	2.077E-01	-5.9 302
199/1251	5.19	5.69	93	1.123	1.17	3.0 52	5.6 0	1.114E-01	-4.6 007
199/1306	4.25	5.20	93	1.067	1.16	2.7 74	6.0 3	1.114E-01	-4.0 140
199/1321	4.69	5.36	93	1.055	1.16	2.9 59	5.7 5	1.105E-01	-4.2 115
199/1336	5.23	6.30	93	.965	1.14	2.0 31	4.3 3	1.010E-01	-4.0 999
199/1351	4.90	5.36	93	1.512	1.24	3.5 40	10.2 3	1.529E-01	-5.0 457
199/1406	4.79	5.25	93	1.449	1.23	3.4 67	10.0 0	1.514E-01	-4.0 133
199/1421	6.22	6.65	93	1.251	1.20	3.2 26	5.1 2	1.311E-01	-6.1 313
199/1436	5.67	6.23	93	1.300	1.22	3.3 06	6.3 1	1.444E-01	-5.7 577

DATE OF RECEIPT: _____

ID	FA-TW		RU	TAD	X10-3	ED	U#	I	Z#	W/m ²	u/m ²	E
	deg.	deg.										
199/1951	5.40	5.93	5	1.340	1.21	33.46	65.5	1.010E-01	-5.5	646	-10.5	272
199/1506	5.64	6.20	92	1.374	1.22	33.00	63.2	1.439E-01	-5.7	092	-10.9	440
199/1521	5.73	6.29	92	1.540	1.25	35.20	69.0	1.613E-01	-6.1	354	-11.5	761
199/1536	5.00	6.46	92	1.454	1.23	34.79	64.0	1.157E-01	-6.4	520	-13.2	303
199/1551	5.13	5.62	92	1.493	1.24	35.22	77.1	1.563E-01	-5.2	976	-9.9	053
199/1606	5.50	6.04	92	1.947	1.31	40.24	93.4	2.030E-01	-6.5	230	-13.4	961
199/1621	6.23	6.06	92	1.124	1.12	30.50	45.2	1.127E-01	-11.4	260	-11.4	576
199/1636	5.77	6.35	92	1.617	1.05	28.68	77.7	1.642E-02	-3.9	330	-0.1	955
199/1651	5.96	6.55	92	794	1.10	25.5	54.1	1.431E-02	-9.6	523	-9.4	672
199/1706	5.60	6.25	92	1.004	1.10	25.06	36.6	1.042E-02	-9.4	232	-0.9	501
199/1721	4.05	5.29	92	1.663	1.06	25.42	32.5	1.623E-02	-6.6	427	-6.6	591
199/1736	4.02	5.20	92	1.366	1.06	25.43	21.7	1.387E-02	-2.2	049	-5.1	755
199/1752	5.24	5.75	92	1.523	1.02	20.04	26.2	1.549E-02	-3.1	556	-6.2	167
199/1807	5.32	5.04	92	1.464	1.00	19.65	23.5	1.404E-02	-3.0	166	-6.5	072
199/1822	4.63	5.05	92	1.507	1.03	21.50	33.0	1.571E-02	-2.2	420	-5.6	574
199/1837	5.00	5.47	92	1.619	1.05	22.66	33.3	1.623E-02	-3.2	602	-6.6	172
199/1852	4.65	5.07	92	1.206	1.20	32.66	74.6	1.139E-01	-4.3	709	-0.1	440
199/1907	4.54	4.96	92	1.250	1.20	32.22	75.1	1.334E-01	-4.1	950	-2.0	907
199/1922	4.04	4.50	92	1.074	1.16	23.0	74.6	1.115E-01	-3.5	211	-6.1	743
199/1937	3.96	4.30	92	1.216	1.19	31.21	06.1	1.266E-01	-3.4	646	-6.5	449
199/1952	4.64	5.00	93	1.109	1.17	30.32	64.4	1.154E-01	-4.0	473	-2.0	630
199/2007	4.99	5.42	93	1.034	1.15	29.31	35.1	1.007E-01	-4.2	225	-0.4	002
199/2022	5.54	6.11	93	1.075	1.12	25.59	41.1	1.279E-02	-9.4	75	-9.2	649
199/2037	5.09	5.59	93	1.311	1.21	33.02	68.3	1.323E-01	-4.9	245	-9.2	552
199/2052	5.24	5.76	93	1.004	1.12	23.11	05.4	1.256E-02	-9.1	905	-10.6	422
199/2107	5.09	5.60	93	1.303	1.21	32.91	62.0	1.164E-01	-4.2	139	-9.0	152
199/2122	5.10	5.62	93	1.000	1.15	22.33	51.0	1.032E-01	-3.5	216	-0.3	519
199/2137	4.77	5.24	93	1.943	1.13	22.90	53.2	1.064E-02	-3.0	545	-2.0	940
199/2152	5.16	5.60	93	1.211	1.19	31.22	61.9	1.268E-01	-9.2	275	-9.2	301
199/2207	5.11	5.62	93	1.339	1.21	33.35	69.4	1.402E-01	-5.0	020	-3.0	684
199/2222	5.15	5.67	93	1.231	1.19	31.99	63.1	1.209E-01	-4.0	460	-5.3	303
199/2237	4.93	5.43	93	1.418	1.23	34.31	76.6	1.404E-01	-4.9	351	-9.0	310
199/2252	5.23	5.76	93	1.570	1.04	21.92	29.5	1.605E-02	-3.5	401	-2.5	910
199/2307	4.90	5.39	93	1.356	1.22	33.40	73.4	1.432E-01	-4.2	009	-9.5	203
199/2322	4.90	5.40	93	1.435	1.23	34.33	76.2	1.502E-01	-5.0	211	-10.0	313
199/2337	4.86	5.34	93	1.539	1.25	35.25	04.9	1.611E-01	-5.0	352	-3.0	202
199/2352	4.40	4.91	94	1.500	1.24	35.26	90.9	1.568E-01	-9.5	090	-0.3	571
199/20002	4.62	5.07	94	1.404	1.24	35.07	06.6	1.550E-01	-4.6	603	-9.1	274
199/20022	4.42	4.91	94	1.242	1.19	32.10	73.2	1.251E-01	-4.0	073	-0.2	220
199/20037	4.20	4.60	94	1.512	1.24	35.47	99.9	1.539E-01	-4.1	722	-0.2	530
199/20052	4.92	5.40	94	1.610	1.26	36.65	02.2	1.690E-01	-5.2	390	-1.02	353
199/200107	4.09	5.30	94	1.527	1.25	35.59	03.2	1.595E-01	-9.9	655	-9.9	515
199/200123	4.04	5.29	93	1.957	1.14	20.19	53.4	1.001E-01	-3.9	210	-0.2	071
199/200138	4.54	4.90	94	1.510	1.24	35.30	90.1	1.522E-01	-4.5	502	-9.0	504
199/2001453	4.65	5.10	94	1.529	1.25	35.50	04.4	1.555E-01	-4.7	701	-9.2	419
199/200208	4.35	4.72	94	1.448	1.23	34.64	93.1	1.532E-01	-4.2	603	-0.4	101
199/200223	4.17	4.56	94	1.305	1.21	32.00	06.0	1.362E-01	-3.0	334	-2.6	670
199/200230	4.29	4.60	94	1.510	1.24	35.34	96.4	1.523E-01	-4.4	040	-0.1	600

15. HINOTE AVERAGES: PARAB (COS)

DATE	TA-TW degC	TA-TW degC	TA-TW degC	RU Z	TAU d/arcsec	ED X10-3	BL cm/sec	I n	Z0 m	H ω/arcsec	F ω/arcsec
200/0203	4.39	4.00	4.00	94	1.502	1.25	36.17	70.1	1.60E-01	45.140	-46.250
200/0300	4.42	4.04	4.04	93	1.463	1.23	34.04	90.4	1.527E-01	-43.004	-45.359
200/0423	4.15	4.53	4.53	93	1.463	1.23	34.44	96.6	1.494E-01	-39.990	-77.522
200/0330	4.40	4.90	4.90	93	1.262	1.20	35.32	76.3	1.316E-01	-43.305	-40.264
200/0353	4.69	5.14	5.14	93	1.409	1.27	37.96	75.8	1.402E-01	-22.796	-52.907
200/0406	4.73	5.17	5.17	93	1.793	1.10	25.63	45.4	1.027E-01	-34.742	-74.034
200/0423	4.48	4.91	4.91	93	1.521	1.25	36.09	95.5	1.640E-01	-46.162	-68.620
200/0430	4.45	4.07	4.07	93	1.401	1.24	35.84	90.5	1.546E-01	-44.462	-45.144
200/0453	4.16	4.53	4.53	93	1.402	1.20	34.72	79.5	1.403E-01	-19.308	-44.525
200/0508	3.72	4.04	4.04	93	1.402	1.14	28.49	76.5	1.072E-01	-20.293	-54.916
200/0523	3.99	4.33	4.33	93	1.810	1.15	28.00	71.2	1.051E-01	-31.646	-60.345
200/0530	4.30	4.60	4.60	93	1.673	1.07	23.54	44.6	1.006E-01	-27.109	-56.984
200/0553	4.24	4.61	4.61	93	1.444	1.09	19.16	31.0	9.627E-02	-21.265	-45.977
200/0600	4.34	4.72	4.72	93	1.374	1.07	17.50	25.4	1.302E-01	-19.707	-44.944
200/0623	4.61	5.03	5.03	93	1.617	1.05	22.59	36.9	1.543E-01	-29.213	-60.211
200/0630	4.10	4.45	4.45	93	1.033	1.15	22.22	70.3	1.076E-01	-33.220	-62.359
200/0653	4.25	4.61	4.61	92	1.338	1.21	35.26	106.5	1.394E-01	-39.076	-71.905
200/0700	4.70	5.24	5.24	92	1.569	1.04	23.71	32.6	1.023E-01	-29.377	-60.439
200/0723	4.60	5.01	5.01	92	1.901	1.12	22.31	53.0	1.235E-01	-35.955	-64.159
200/0730	4.05	4.30	4.30	92	1.009	1.16	22.97	75.1	1.133E-01	-33.606	-60.439
200/0753	4.00	5.23	5.23	92	1.463	1.23	34.08	61.3	1.526E-01	-40.541	-47.107
200/0800	5.12	5.59	5.59	92	1.402	1.10	31.30	60.0	1.234E-01	-47.174	-47.949
200/0824	4.76	5.19	5.19	92	1.032	1.15	22.35	50.0	1.076E-01	-40.335	-75.510
200/0839	4.32	4.70	4.70	92	1.143	1.17	30.71	72.2	1.100E-01	-37.543	-60.070
200/0854	4.77	4.63	4.63	92	1.207	1.19	31.50	72.5	1.256E-01	-30.607	-60.534
200/0907	4.65	5.07	5.07	92	1.603	1.26	36.41	92.5	1.670E-01	-40.037	-46.910
200/0924	4.57	4.97	4.97	92	1.176	1.18	31.19	69.5	1.226E-01	-30.165	-75.166
200/0939	4.31	4.60	4.60	92	1.431	1.23	34.39	90.7	1.490E-01	-41.977	-74.013
200/0954	4.73	5.15	5.15	92	1.701	1.28	36.39	101.1	1.097E-01	-52.373	-92.686
200/1007	4.08	5.23	5.23	92	1.214	1.19	31.71	67.4	1.266E-01	-44.273	-41.473
200/1024	4.47	4.86	4.86	92	1.200	1.20	32.54	72.6	1.339E-01	-41.566	-74.530
200/1039	4.97	5.42	5.42	92	1.973	1.14	20.30	51.0	1.015E-01	-41.207	-77.104
200/1054	4.04	5.29	5.29	92	1.760	1.09	25.10	42.2	1.293E-01	-55.064	-64.041
200/1109	4.53	4.92	4.92	92	1.000	1.16	29.71	72.5	1.112E-01	*****	*****
200/1124	4.53	4.92	4.92	92	1.215	1.19	31.71	72.5	1.267E-01	-91.137	-74.330
200/1139	4.96	5.40	5.40	92	1.235	1.19	31.97	65.9	1.207E-01	-46.410	-45.221
200/1154	4.68	5.06	5.06	92	1.599	1.26	36.37	92.2	1.666E-01	-40.011	-45.290
200/1209	4.61	5.03	5.03	92	1.504	1.24	35.30	80.0	1.570E-01	-46.255	-46.900
200/1224	4.57	4.97	4.97	92	1.192	1.10	31.42	70.4	1.243E-01	-41.212	-74.403
200/1239	4.76	5.18	5.18	92	1.062	1.16	29.65	59.6	1.100E-01	-40.106	-73.922
200/1254	4.69	5.09	5.09	92	1.198	1.19	31.40	60.3	1.240E-01	-42.704	-74.909
200/1309	4.62	5.02	5.02	91	1.337	1.21	33.26	77.7	1.394E-01	-44.290	-76.922
200/1324	4.76	5.10	5.10	91	1.493	1.24	35.17	83.9	1.550E-01	-40.500	-43.001
200/1339	5.05	5.49	5.49	91	1.569	1.25	36.11	83.9	1.643E-01	-53.034	-94.101
200/1354	5.05	5.51	5.51	91	1.552	1.25	35.93	81.9	1.626E-01	-52.944	-94.709
200/1409	6.11	6.71	6.71	91	1.777	1.29	30.49	75.5	1.066E-01	-70.604	-120.776
200/1424	5.41	5.92	5.92	91	1.745	1.20	30.12	65.3	1.031E-01	-60.259	-109.639
200/1439	4.99	5.45	5.45	91	1.631	1.26	36.06	82.0	1.174E-01	-53.367	-96.620

15 HUNDRE OVERGALS PARAGLIDERS

DEC. Z	1A-1W deg/c	10A-10W deg/c	RH Z	100 d/c***2	CD X10-3	HA m/s	C m	Z0 m	W m/s**2	F W/m**2
200/1454	5.95	6.52	91	1.749	1.200	30.13	76.6	10561-01	-57 946	-132.1096
200/1509	5.83	5.40	91	1.340	1.21	33.45	71.0	14310-03	-49 335	-105.074
200/1524	4.89	5.50	91	1.659	1.22	37.04	90.1	12314-01	-52 104	-106.075
200/1540	5.10	5.54	91	1.300	1.22	35.83	75.4	14460-03	-50 955	-106.294
200/1555	5.19	5.65	91	1.506	1.24	35.50	76.0	15701-01	-54 160	-92.190
200/1610	5.72	6.25	92	1.610	1.26	36.51	72.9	16022-01	-63 612	-141.332
200/1625	5.32	5.00	92	1.459	1.25	34.77	71.6	15250-01	-54 107	-97.711
200/1640	5.30	5.03	92	1.516	1.24	35.46	73.6	15040-03	-56 650	-142.465
200/1655	5.45	5.96	91	1.165	1.10	31.10	55.6	12111-01	-50 646	-92.1848
200/1710	****	****	**	****	1.10	26.07	****	10561-02	****	****
200/1725	4.75	5.10	92	1.033	1.11	26.29	47.4	10707-02	-35 105	-63.902
200/1740	5.19	5.62	92	1.002	1.07	25.10	34.9	71330-02	-36 161	-71.409
200/1755	4.67	5.09	91	1.556	1.03	21.47	43.0	10001-02	-20.054	-56.530
200/1810	5.37	5.00	91	1.025	1.11	26.19	40.2	10542-02	-41 752	-100.632
200/1825	5.70	6.23	91	1.699	1.07	24.13	31.0	73570-02	-41 274	-100.107
200/1840	5.18	5.64	91	1.092	1.12	27.21	45.3	95200-02	-43 559	-75.512
200/1855	4.90	5.33	91	1.916	1.13	27.57	50.0	95743-02	-39 127	-71.600
200/1910	5.86	5.51	91	1.002	1.12	27.06	46.3	92270-02	-40 070	-74.041
200/1925	5.20	5.75	91	1.943	1.13	27.59	46.9	90660-02	-43 741	-100.462
200/1940	5.55	6.06	91	1.025	1.15	29.10	47.9	10730-01	-40 555	-101.021
200/1955	5.96	6.52	91	1.528	1.04	22.32	25.7	16262-02	-40 297	-73.191
200/2010	5.51	6.01	91	1.965	1.14	20.39	45.5	10100-01	-46 746	-104.145
200/2025	4.91	5.34	91	1.040	1.11	26.53	46.2	100670-02	-37 290	-63.942
200/2040	4.39	4.76	91	1.667	1.06	23.52	42.6	169720-02	-20 631	-53.760
200/2055	5.00	5.44	90	1.537	1.03	21.12	29.2	156190-02	-30.205	-57 674
200/2110	5.63	6.13	90	1.662	1.06	23.47	30.6	169410-02	-39 503	-72 557
200/2125	4.62	5.24	89	1.745	1.09	24.04	41.1	77761-02	-51 206	-56.512
200/2140	4.76	5.11	88	1.022	1.10	26.05	46.4	105740-02	-35.006	-54.760
200/2155	4.91	5.28	88	1.142	1.10	30.75	61.7	11911-01	-44.096	-66.175
200/2210	5.29	5.71	89	1.339	1.21	33.32	66.2	13991-01	-52 307	-101.375
200/2225	5.75	6.24	89	1.257	1.20	32.31	56.4	13150-01	-56.003	-93.160
200/2240	4.52	7.12	90	1.799	1.10	25.70	30.7	103740-02	-52 166	-95.179
200/2255	5.70	6.20	90	1.929	1.13	27.76	41.0	97000-02	-47 129	-104.117
200/2311	4.35	4.67	90	1.140	1.17	30.67	71.3	11050-03	-37 859	-50.370
200/2326	3.69	3.92	90	1.095	1.16	30.07	65.1	11350-01	-25 746	-92.023
200/2341	3.30	3.50	90	1.119	1.17	30.33	97.9	11590-01	-26 609	-51.293
200/2356	3.67	3.91	90	1.345	1.21	33.26	104.1	13930-01	-33 094	-96.107
201/0011	4.63	4.99	91	1.461	1.23	34.71	104.4	15100-03	-46.326	-73.292
201/0026	5.39	5.06	91	2.163	1.34	42.20	105.5	22520-01	-67 092	-110.335
201/0041	5.10	5.54	91	1.566	1.25	35.97	100.5	16290-03	-54.077	-90.101
201/0056	4.77	5.17	92	1.896	1.12	27.20	50.2	93270-02	-37 574	-66.657
201/0111	3.12	3.31	91	1.944	1.13	27.02	94.0	97490-02	-24.455	-32.967
201/0126	4.37	4.72	92	1.809	1.29	30.59	111.1	10760-01	-40.194	-76.113
201/0141	4.90	5.32	92	2.213	1.34	42.71	120.1	22960-03	-60 757	-99.205
201/0156	5.33	5.79	92	2.492	1.38	45.33	125.3	25090-01	-70 713	-116.145
201/0211	5.45	5.93	92	2.766	1.41	47.77	134.2	20740-01	-25.994	-125.909
201/0226	5.55	6.07	93	2.044	1.32	41.11	96.1	21290-01	-67.670	-112.337
201/0241	5.21	5.69	93	1.894	1.30	39.57	95.5	19720-01	-60.602	-107.100

15 MINUTE AVERAGES - PARABOLICS

DIF. Z	IA-1W deg	IA-1W deg	PA-1W deg	PH Z	TAO deg	CD X10-3	UE cm/sec	I 0	Z0 cm	H m/sec	F m/sec
201/0256	5.93	6.54	94	2.424	1.37	44.77	106.0	25.27E-01	-70.704	-14.2	52.9
201/0311	5.37	5.00	93	2.367	1.36	44.26	106.6	24.00E-01	-69.550	-12.4	30.5
201/0326	4.89	5.33	93	2.091	1.33	41.57	114.7	21.72E-01	-50.005	-10.4	14.1
201/0341	5.06	5.52	93	2.110	1.33	41.04	114.0	22.05E-01	-64.232	-10.0	6.00
201/0356	5.10	5.66	93	0.155	1.11	26.40	97.2	06.50E-02	-40.217	-7.7	92.0
201/0411	5.00	5.50	93	.664	1.06	23.45	34.7	62.27E-02	-34.255	-7.0	0.60
201/0426	4.67	5.09	94	.772	1.09	24.77	44.3	10.04E-02	-33.715	-6.6	15.1
201/0441	4.74	5.10	93	1.690	1.27	32.17	95.9	17.20E-01	-53.436	-9.3	0.55
201/0456	5.24	5.73	93	1.790	1.29	30.50	90.5	13.72E-01	-59.430	-10.0	0.79
201/0511	5.34	5.04	92	1.124	1.17	30.57	54.0	11.24E-01	-40.512	-9.2	1.00
201/0526	4.62	5.03	93	1.017	1.15	29.05	59.5	1.064E-01	-30.506	-7.2	9.17
201/0542	5.02	5.40	92	.354	.96	17.13	19.0	3.897E-02	-23.757	-5.9	5.05
201/0557	5.25	5.74	92	.233	.90	13.09	12.9	2.025E-02	-19.391	-4.6	0.49
201/0612	5.07	5.52	92	.570	1.04	21.71	30.1	5.935E-02	-31.005	-6.3	1.07
201/0627	4.90	5.34	92	.032	1.11	26.23	45.2	0.644E-02	-32.466	-7.0	16.9
201/0642	5.13	5.61	92	.695	1.07	23.99	35.0	7.257E-02	-36.067	-7.1	1.39
201/0657	4.97	5.42	92	.993	1.14	20.67	52.0	1.055E-01	-41.235	-7.0	0.50
201/0712	4.69	5.10	92	1.009	1.15	20.00	57.7	3.051E-01	-39.052	-7.1	9.20
201/0727	4.97	5.42	92	.826	1.11	26.14	44.1	1.061E-02	-37.650	-7.2	5.10
201/0742	5.61	6.13	92	.947	1.13	20.02	43.5	9.007E-02	-47.299	-10.0	9.5
201/0757	5.22	5.60	92	.800	1.10	25.19	40.6	0.945E-02	-39.957	-7.4	4.57
201/0812	5.37	5.05	92	.800	1.10	25.06	39.7	0.927E-02	-43.366	-7.7	2.05
201/0827	5.04	5.47	92	.514	1.02	20.67	22.5	5.535E-02	-29.015	-5.3	0.03
201/0842	4.35	4.70	92	.507	1.04	24.00	37.9	6.095E-02	-26.304	-4.0	0.51
201/0857	4.50	4.86	92	1.669	1.16	29.67	63.7	1.051E-01	-30.245	-6.7	3.76
201/0912	5.42	5.90	92	1.162	1.10	30.90	55.4	1.202E-01	-30.297	-10.2	0.20
201/0927	5.76	6.20	92	1.555	1.25	35.06	69.1	1.220E-01	-62.247	-10.0	5.34
201/0942	5.61	6.10	92	1.175	1.10	31.16	53.7	1.223E-01	-52.717	-9.2	9.10
201/0957	5.13	5.57	92	1.076	1.16	29.00	54.7	1.157E-01	-45.224	-7.9	0.34
201/1012	4.56	4.92	92	1.105	1.17	30.17	62.0	1.146E-01	-39.565	-6.6	2.30
201/1027	4.70	5.09	92	1.142	1.17	30.68	64.6	1.186E-01	-61.061	-7.1	2.99
201/1042	5.02	5.45	92	1.321	1.21	33.02	65.0	1.323E-01	-40.033	-0.3	5.53
201/1057	4.70	5.17	92	1.108	1.10	31.30	65.9	1.250E-01	-43.534	-7.4	2.55
201/1112	5.14	5.59	92	1.624	1.26	36.63	82.0	1.690E-01	-55.523	-9.4	1.34
201/1120	5.35	5.82	92	1.539	1.25	35.67	74.0	1.603E-01	-56.749	-9.7	3.12
201/1143	5.51	6.00	92	1.635	1.26	36.77	77.1	1.703E-01	-60.379	-10.4	1.21
201/1150	5.59	6.08	92	1.190	1.19	31.49	55.2	1.245E-01	-52.933	-9.3	4.23
201/1213	5.46	5.94	92	1.209	1.19	31.62	57.1	1.260E-01	-51.775	-9.0	3.00
201/1220	5.22	5.67	91	.755	1.09	24.90	32.0	2.060E-02	-30.555	-6.2	6.35
201/1243	5.20	5.65	91	1.265	1.20	32.34	63.5	1.337E-01	-49.064	-0.5	6.77
201/1258	5.20	5.64	91	1.926	1.31	39.90	97.6	2.005E-01	-60.907	-10.1	1.20
201/1313	5.32	5.70	91	1.604	1.26	36.42	70.0	1.671E-01	-57.377	-9.2	3.96
201/1320	5.99	6.54	91	1.819	1.30	39.15	59.7	1.551E-01	-70.470	-12.2	6.04
201/1343	5.89	6.41	91	1.037	1.29	39.02	60.7	1.338E-01	-60.071	-13.6	0.60
201/1350	5.18	5.59	90	1.920	1.30	39.02	97.6	1.596E-01	-60.575	-9.3	4.05
201/1413	5.14	5.56	90	1.607	1.26	36.44	62.0	1.673E-01	-55.266	-0.7	3.05
201/1420	5.52	5.99	90	1.560	1.25	35.94	71.3	1.627E-01	-59.232	-9.7	9.52
201/1443	5.61	6.10	91	1.130	1.17	30.70	52.1	1.137E-01	-53.907	-8.9	0.62

C. D. WILFONG, JR. FOR R.E.C.F.: PROPRIETORS

FIG. 2											
TA-TW	TOW-TOW	PH	TAU	CE	UE	I	ZO	H	F		
degE	degC	Z	degE	X10-3	cm/sec	m	deg	degE	m/msec		
5.35	5.01	90	1.60	1.22	3.2	0.1	1.270E-01	50.757	-96.300		
4.04	5.22	90	1.502	1.24	3.5	0.3	1.504E-01	49.964	-79.233		
4.56	4.90	90	1.514	1.24	3.5	0.9	1.527E-01	46.543	-71.350		
5.24	5.60	91	1.013	1.29	3.0	9.0	1.006E-01	59.756	-96.397		
5.56	6.04	91	1.156	1.06	3.0	5.5	6	51.701	-63.685		
4.03	5.26	90	1.069	1.16	2.9	6.9	1.114E-01	42.345	-67.900		
4.06	5.24	90	1.008	1.16	2.9	5.6	1.151E-01	42.603	-63.193		
4.75	5.11	90	1.923	1.13	2.2	6.0	1.939E-02	37.920	-61.037		
5.11	5.53	90	1.065	1.06	3.1	3.0	1.234E-01	47.294	-77.755		
5.03	6.40	91	1.000	1.15	2.0	0.0	1.045E-01	53.524	-90.535		
6.16	6.71	91	1.504	1.14	2.0	5.7	1.025E-01	54.010	-95.740		
5.34	5.79	91	1.006	1.15	2.0	0.5	1.049E-01	45.937	-79.125		
4.77	5.16	91	1.035	1.15	2.0	2.4	1.027E-01	40.520	-62.605		
4.90	5.39	91	1.024	1.15	2.0	1.0	1.067E-01	42.503	-72.774		
5.22	5.67	91	1.904	1.02	2.2	3.5	1.942E-02	42.329	-74.499		
4.91	5.31	91	1.703	1.09	2.3	4.4	1.052E-02	36.272	-63.506		
4.95	5.36	91	1.666	1.06	2.3	4.7	1.694E-02	33.639	-60.430		
4.00	5.29	91	1.619	1.05	2.2	6.3	1.635E-02	34.747	-50.072		
5.10	5.53	91	1.747	1.09	2.4	0.6	1.770E-02	37.161	-62.302		
5.53	6.03	91	1.890	1.12	2.2	1.5	1.920E-02	45.006	-72.612		
4.96	5.30	91	1.959	1.14	2.0	1.5	1.980E-02	40.059	-71.004		
4.77	5.16	91	1.903	1.12	2.2	3.1	1.939E-02	37.670	-66.102		
5.04	5.47	91	1.940	1.13	2.2	0.4	1.975E-02	36.699	-72.040		
4.62	4.99	91	1.924	1.13	2.2	6.6	1.930E-02	36.655	-62.533		
5.22	5.67	91	1.974	1.14	2.0	3.7	1.014E-01	44.202	-77.666		
4.97	5.30	91	1.951	1.13	2.0	0.2	1.959E-02	30.040	-73.103		
5.46	5.95	92	1.050	1.11	2.6	5.0	1.067E-02	45.430	-79.470		
5.01	6.34	92	1.012	1.10	2.6	9.4	1.042E-02	45.704	-70.720		
4.47	4.03	92	1.903	1.12	2.2	2.7	1.937E-02	34.720	-59.032		
4.95	5.37	92	1.210	1.19	3.5	6.1	1.250E-01	45.924	-79.609		
5.40	5.90	92	1.940	1.13	2.2	0.9	1.929E-02	45.900	-70.459		
5.07	6.42	92	1.071	1.10	2.6	0.9	1.057E-02	46.636	-80.937		
5.04	6.39	92	1.777	1.09	2.5	3.7	1.017E-02	45.063	-70.933		
5.56	6.07	92	1.577	1.04	2.1	0.5	1.015E-02	36.170	-71.650		
5.40	5.99	92	1.435	1.04	1.9	0.0	1.035E-02	30.390	-62.517		
4.72	5.12	92	1.223	1.00	1.3	5.7	1.233E-02	35.065	-37.100		
4.41	4.76	92	1.193	1.00	1.2	5.9	1.190E-02	32.309	-30.970		
5.05	5.49	92	1.211	1.09	1.3	2.1	1.219E-02	32.067	-39.546		
3.95	4.24	92	1.162	1.06	1.1	5.0	1.162E-02	40.521	-23.765		
4.72	5.11	92	1.207	1.09	1.3	0.9	1.214E-02	34.900	-34.036		
5.06	5.40	92	1.310	1.04	1.6	1.9	1.310E-02	22.449	-45.056		
4.00	5.19	91	1.210	1.09	1.3	3.9	1.216E-02	36.030	-36.129		
6.24	6.02	92	1.091	1.00	0.6	2	1.090E-01	13.923	-55.352		
6.76	7.39	91	1.063	1.00	0.6	2	1.063E-01	13.490	-53.490		
4.90	5.29	91	1.091	1.00	0.6	2	1.097E-01	7.004	-24.068		
4.02	5.21	91	1.110	1.03	0.9	1.0	1.110E-01	9.765	-27.066		
5.66	6.16	91	1.052	1.06	1.5	1.5	1.052E-01	-5.005	-24.390		
5.61	6.11	91	1.049	1.06	1.4	1.6	1.049E-01	-23.705	-23.331		

15 MINUTE AVERAGES: PARAMETERS

DIG Z	1A-10 degC	10A-10a degC	FO Z	TAU d/cm**2	ED X10-3	DA cm/sec	I m	Z0 cm	W/m**2	E w/m**2
202/0300	6.10	6.75	91	0.50	74	5.63	3.3	5999E-03	-5.016	-23.907
202/0315	5.41	5.07	91	0.40	70	3.00	-5.0	1493E-03	1.181	-13.992
202/0330	5.20	5.73	91	0.50	76	6.35	5.5	3244E-03	-4.479	-21.922
202/0345	6.94	7.61	91	0.29	72	4.49	2.4	2598E-03	-3.552	-23.052
202/0400	7.20	0.01	91	0.14	69	3.46	4.3	1508E-03	-2.976	-12.314
202/0415	7.97	0.00	91	0.15	70	3.59	3.7	1620E-03	-2.541	-22.727
202/0430	7.50	0.04	91	0.10	60	2.02	-3.2	1030E-03	1.007	-10.550
202/0445	7.69	0.48	91	0.07	67	2.45	-7	7574E-04	1.060	-35.177
202/0500	0.15	9.01	91	0.11	68	3.00	3.5	1135E-03	-7.10	-19.209
202/0515	0.23	9.11	91	0.09	68	2.70	90.3	9764E-04	-0.91	-30.965
202/0530	6.46	7.00	91	1.03	81	9.25	4.9	1077E-02	-15.127	-40.010
202/0545	4.34	4.60	91	3.07	97	17.07	26.4	4024E-02	-20.217	-39.977
202/0600	2.79	2.94	91	3.29	95	16.42	53.7	3395E-02	-2.721	-16.239
202/0615	3.36	3.50	91	4.03	90	18.19	41.3	4170E-02	-13.613	-25.540
202/0630	3.90	4.10	91	2.03	53	15.25	29.5	2953E-02	-13.505	-20.697
202/0645	3.56	3.00	91	4.34	99	18.85	39.6	4435E-02	-13.002	-20.907
202/0700	3.65	3.90	91	5.04	97	17.75	34.5	5971E-02	-15.167	-20.916
202/0715	3.61	3.85	91	5.07	1.01	20.40	44.0	5243E-02	-10.879	-31.635
202/0730	3.01	3.10	91	3.94	97	17.95	50.2	4064E-02	-10.694	-20.012
202/0745	3.14	3.33	91	3.32	95	16.49	41.3	3424E-02	-10.174	-20.443
202/0800	3.10	3.29	91	2.07	93	15.35	39.1	2962E-02	0.679	-10.721
202/0815	2.45	2.56	91	1.01	07	17.15	101.3	10161E-02	-1.661	-9.052
202/0830	2.50	2.71	91	2.24	09	13.53	63.1	2305E-02	-3.661	-11.526
202/0845	2.65	2.78	91	3.35	95	16.55	61.3	3349E-02	-6.922	-14.235
202/0900	3.10	3.20	91	2.27	90	13.65	35.1	2346E-02	-6.775	-16.748
202/0915	3.14	3.32	91	2.25	90	13.60	34.1	2322E-02	-6.076	-16.941
202/0930	2.79	2.93	91	6.22	1.05	22.56	79.9	6911E-02	-13.469	-20.473
202/0945	2.76	2.91	91	6.92	1.07	23.79	80.0	7129E-02	-14.333	-21.505
202/1000	1.76	1.79	91	0.31	1.10	26.02	261.6	1523E-02	-6.311	-5.189
202/1015	2.12	2.20	91	1.339	1.21	33.04	234.0	1376E-01	-14.454	-14.075
202/1030	1.95	2.00	91	1.494	1.24	39.90	227.6	1535E-01	-13.309	-10.626
202/1045	1.03	1.07	91	1.462	1.23	34.51	329.1	1500E-01	-11.700	-7.915
202/1100	1.55	2.01	91	1.662	1.26	36.02	321.5	1705E-01	-14.545	-11.147
202/1115	2.34	2.44	91	1.641	1.26	36.63	236.1	1600E-01	-19.473	-20.091
202/1130	2.21	2.30	91	1.138	1.17	30.48	191.3	1170E-01	-13.061	-14.504
202/1145	2.30	2.39	91	1.200	1.18	31.31	107.1	1235E-01	-15.300	-16.554
202/1200	1.40	1.49	91	1.503	1.25	35.91	537.2	1624E-01	-7.930	17.3
202/1215	1.47	1.47	91	1.591	1.25	36.01	530.4	1633E-01	-7.035	30.1
202/1230	1.30	1.29	91	1.302	1.22	35.86	752.0	1415E-01	-4.707	4.850
202/1245	1.40	1.49	91	1.449	1.23	34.30	524.7	1489E-01	-7.250	21.9
202/1300	1.57	1.58	91	1.572	1.25	35.02	473.5	1616E-01	-0.990	-1.659
202/1315	1.58	1.59	91	1.642	1.26	36.61	404.2	1609E-01	-9.499	-1.936
202/1330	1.72	1.75	90	1.895	1.30	39.34	449.4	1950E-01	-12.690	-5.151
202/1345	1.08	1.92	90	2.092	1.33	41.35	416.0	2155E-01	-15.935	-7.910
202/1400	1.07	1.00	89	1.650	1.26	36.73	1699E-01	-13.153	-9.263	-0.24
202/1417	1.74	1.75	89	1.516	1.24	35.19	375.2	1560E-01	-10.806	0.24
202/1432	1.61	1.60	89	1.764	1.28	37.95	405.6	1015E-01	-10.531	-3.432
202/1447	1.78	1.79	89	1.977	1.31	40.19	435.1	2035E-01	-13.906	-3.31

15. BUNNIE GARDEN PARADES

DATE	TIME	LOC	TAU	CD	PA	I	ZO	H	F
			u/cm ²	X10 ⁻³	cm/sec	0	04	w/m ²	w/m ²
202/1502	1.09	1.94	1.344	1.21	35.14	291.6	1.300E-01	-11.694	-2.657
202/1517	1.91	1.94	1.601	1.25	35.17	325.3	1.640E-01	-13.643	-3.229
202/1532	1.01	1.02	1.676	1.27	37.00	374.9	1.720E-01	-12.600	-1.604
202/1547	1.90	1.93	1.665	1.26	36.96	339.9	1.715E-01	-13.849	-4.270
202/1602	2.05	2.09	1.990	1.31	40.55	346.9	2.034E-01	-17.747	-0.550
202/1617	2.04	2.09	2.561	1.30	45.77	431.9	2.640E-01	-20.664	-9.347
202/1632	1.92	1.95	2.513	1.30	45.54	421.5	2.505E-01	-10.503	-5.613
202/1647	1.07	1.90	2.672	1.40	46.74	510.0	2.750E-01	-10.477	-4.477
202/1702	***	***	***	1.35	43.10	***	2.340E-01	***	***
202/1717	***	***	***	1.33	41.97	***	2.249E-01	***	***
202/1732	***	***	***	1.33	41.30	***	2.157E-01	***	***
202/1747	***	***	***	1.31	39.95	***	2.034E-01	***	***
202/1802	***	***	***	1.24	37.23	***	1.531E-01	***	***
202/1817	***	***	***	1.22	34.16	***	1.470E-01	***	***
202/1832	***	***	***	1.21	33.40	***	1.405E-01	***	***
202/1847	2.70	2.70	1.631	1.26	36.35	100.3	1.665E-01	-23.090	-15.737
202/1902	2.73	2.78	1.800	1.29	38.42	205.5	1.860E-01	-25.063	-0.964
202/1917	2.78	2.80	1.645	1.26	36.74	104.0	1.701E-01	-25.257	-4.66
202/1932	2.97	2.96	1.447	1.23	34.46	149.0	1.492E-01	-25.720	5.789
202/1947	2.59	2.50	1.333	1.21	33.10	376.5	1.307E-01	-20.001	22.431
202/2002	1.47	1.23	1.201	1.10	31.26	497.4	1.235E-01	-5.015	50.602
202/2017	1.13	-29	1.345	1.21	33.20	359.3	1.330E-01	9.549	69.274
202/2032	-0.06	-53	1.629	1.29	36.76	450.0	1.692E-01	11.916	110.021
202/2048	-2.78	-3.67	2.570	1.39	46.00	460.0	2.668E-01	54.307	233.000
202/2103	-2.39	-3.24	2.712	1.41	47.30	290.5	2.901E-01	40.907	228.027
202/2110	-2.10	-2.92	2.875	1.42	40.71	299.9	2.909E-01	45.133	225.665
202/2133	-3.30	-4.42	1.919	1.30	32.07	102.5	1.091E-01	57.697	243.005
202/2148	-3.19	-4.22	2.644	1.40	46.76	356.9	2.750E-01	61.034	272.111
202/2203	-2.80	-3.87	2.667	1.40	46.95	172.1	2.777E-01	56.370	261.212
202/2218	-2.60	-3.54	2.832	1.42	48.30	200.5	2.949E-01	52.930	255.975
202/2233	-2.80	-3.76	2.968	1.43	49.53	200.1	3.090E-01	56.802	265.962
202/2248	-4.15	-5.36	3.370	1.40	52.79	367.2	3.511E-01	82.455	348.507
202/2303	-4.98	-6.37	3.332	1.47	52.52	141.0	3.476E-01	96.270	396.940
202/2318	-5.43	-6.93	3.325	1.47	52.50	130.5	3.472E-01	103.005	425.307
202/2333	-5.20	-6.78	3.303	1.47	52.35	133.0	3.455E-01	101.057	423.400
202/2348	-5.10	-6.60	3.273	1.47	52.14	136.0	3.429E-01	97.610	421.007
243/0003	-5.29	-6.86	3.042	1.44	50.20	121.2	3.104E-01	98.243	429.600
203/0018	-5.28	-6.87	2.869	1.43	40.05	113.0	3.007E-01	95.967	426.437
203/0033	-4.90	-6.54	2.597	1.39	46.49	106.0	2.723E-01	80.151	401.517
203/0048	-3.61	-4.90	2.630	1.39	46.52	141.1	2.727E-01	66.041	336.869
203/0103	-4.32	-5.79	2.630	1.39	45.92	117.5	2.656E-01	77.153	374.033
203/0110	-4.93	-6.56	2.830	1.42	40.75	120.5	2.994E-01	90.039	433.062
203/0133	-4.55	-6.13	2.689	1.41	47.37	120.9	2.627E-01	82.338	409.710
203/0148	-4.09	-6.56	2.055	1.33	41.45	80.3	2.162E-01	79.930	389.674
203/0203	-4.97	-6.68	2.391	1.37	44.71	90.2	2.511E-01	65.209	425.915
203/0218	-4.42	-6.05	2.826	1.42	40.62	137.1	2.970E-01	81.457	429.192
203/0233	-4.69	-6.40	2.959	1.44	49.77	132.5	3.123E-01	87.067	450.616
203/0248	-4.69	-6.42	2.223	1.35	43.16	95.2	2.346E-01	79.037	414.460

Page 2	1A-TW degE	10A-TW degE	RD Z	TAO m/m	C6 x10-3	0E degE	C m	Z0 m	D m/m	F m/m
2203/0303	-4.66	-6.40	70	2.207	1.36	43.20	-22.1	2.2410-01	29.247	421.599
2203/0310	-4.44	-6.14	70	1.972	1.34	40.43	01.4	2.0301-03	71.650	305.691
2203/0353	-4.26	-6.54	70	1.796	1.29	50.51	-23.5	1.0910-01	74.423	350.743
2203/0403	-4.07	-6.77	70	1.403	1.29	30.07	-22.5	1.0905-01	75.103	406.725
2203/0423	-4.70	-6.53	70	1.553	1.20	50.35	72.6	1.0521-01	72.909	397.005
2203/0430	-5.25	-7.24	70	1.924	1.31	40.21	73.5	2.0327-01	07.765	442.005
2203/0453	-4.92	-6.05	69	2.107	1.34	32.10	10.6	2.2531-01	00.562	45.1.161
2203/0500	-4.37	-5.94	69	1.706	1.29	30.76	02.3	1.0930-01	66.224	304.174
2203/0523	-4.50	-6.41	70	1.555	1.25	35.16	-04.6	1.0478-01	60.401	313.306
2203/0538	-4.64	-6.47	70	1.582	1.25	36.01	-63.4	1.6341-01	60.964	370.243
2203/0553	-4.59	-6.42	70	1.364	1.26	36.77	-25.0	1.6501-01	60.662	300.604
2203/0600	-4.47	-6.30	70	1.073	1.30	39.71	-02.7	1.0901-01	71.306	406.369
2203/0623	-4.37	-6.19	70	1.298	1.21	33.06	-54.5	1.1374-01	61.978	363.046
2203/0630	-4.30	-6.10	70	1.048	1.16	29.71	-43.1	1.1129-01	56.909	310.731
2203/0653	-4.60	-6.45	70	7.05	1.06	24.36	-25.6	7.4764-02	52.029	277.971
2203/0700	-4.63	-6.50	69	6.06	1.06	23.33	-23.0	6.0431-02	51.626	273.116
2203/0723	-4.67	-6.52	69	5.82	1.02	20.96	-12.7	5.5361-02	40.639	250.342
2203/0738	-4.74	-6.64	70	3.97	90	10.10	-12.4	4.1251-02	44.619	222.330
2203/0753	-4.94	-6.09	70	4.09	1.01	20.29	-15.0	5.1100-02	49.582	251.012
2203/0803	-5.20	-7.31	70	5.20	1.02	23.07	-16.4	5.6031-02	53.645	269.510
2203/0823	-5.32	-7.37	70	6.19	1.05	22.03	-19.6	5.5651-02	56.895	202.139
2203/0838	-5.31	-7.35	70	8.00	1.10	25.95	-26.4	3.0402-02	61.050	323.065
2203/0903	-5.39	-7.40	69	7.00	1.10	25.63	-25.7	3.2740-02	61.295	319.715
2203/0923	-5.36	-7.44	69	5.51	1.03	21.53	-16.9	5.0431-02	55.226	232.374
2203/0930	-5.30	-7.30	69	3.77	97	12.03	-10.9	4.0040-02	40.512	210.595
2203/0950	-5.77	-7.77	67	4.66	99	10.01	-11.3	4.0051-02	40.397	243.614
2203/1023	-3.79	-5.77	67	4.66	99	12.23	-17.1	4.6591-02	30.502	211.414
2203/1030	-3.57	-5.50	67	4.44	1.00	19.43	-17.2	4.7441-02	29.402	237.930
2203/1053	-3.67	-5.61	67	4.60	1.00	19.76	-18.7	4.9210-02	30.673	242.597
2203/108	-3.00	-5.76	68	4.97	1.02	20.53	-19.9	5.3078-02	40.603	252.620
2203/1423	-3.41	-5.30	68	1.349	1.82	33.05	-19.9	1.0431-01	51.035	366.161
2203/1438	-3.49	-5.41	67	9.49	1.14	28.39	-45.9	1.0151-01	46.572	322.592
2203/1453	-3.59	-5.51	68	1.797	1.29	32.05	-45.3	1.0211-01	50.366	415.002
2203/1500	-3.20	-5.05	67	1.520	1.25	35.93	-46.1	1.6261-01	50.364	376.925
2203/1523	-2.39	-4.16	66	1.630	1.27	32.24	-31.7	1.1471-01	41.175	320.603
2203/1538	-1.79	-3.51	64	1.050	1.30	39.71	-16.9	1.1471-01	41.309	406.111
2203/1553	-2.33	-4.21	63	1.764	1.29	30.74	-131.6	1.0911-01	41.309	406.111
2203/1600	-2.67	-4.66	61	2.797	1.42	48.76	-205.5	2.2961-01	57.773	515.457
2203/1623	-2.71	-4.75	61	2.212	1.35	43.39	-153.6	2.3201-01	40.693	401.402
2203/1638	-2.75	-4.03	60	1.901	1.13	27.60	-51.9	2.2531-02	20.239	343.052
2203/1653	-2.61	-4.65	60	7.68	1.10	25.57	-44.4	0.2321-02	35.230	315.902
2203/1700	*****	*****	**	*****	1.11	26.45	*****	0.0161-02	*****	*****
2203/1723	*****	*****	**	*****	1.14	20.45	*****	1.0201-01	*****	*****
2203/1738	*****	*****	**	*****	1.19	23.04	*****	1.2771-01	*****	*****
2203/1753	*****	*****	**	*****	1.30	39.79	*****	1.0951-01	*****	*****
2203/1800	*****	*****	**	*****	1.34	42.30	*****	2.2541-01	*****	*****
2203/1823	*****	*****	**	*****	1.39	46.47	*****	2.2711-01	*****	*****
203/1838	-2.71	-4.57	66	2.947	1.44	50.11	-212.1	1.3161-01	54.172	409.152

15 HINICF AVERAGES PARAGETERS

DIG. Z	IA-TW degC	IVA-TW degC	RH %	TAU m/sec	CO m/sec	HA m/sec	I m	Z0 cm	H m/sec	E m/sec
203/1053	-2.60	-4.50	68	3.134	1.46	51.60	-2.95	3.364E-01	54.002	407.910
203/1908	-2.37	-4.14	67	3.994	1.55	50.37	-3.47	0.422E-01	54.414	522.044
203/1923	-2.54	-4.36	67	2.290	1.36	94.24	-1.92	0.944E-01	47.707	454.700
203/1938	-2.63	-4.45	67	1.457	1.24	35.24	-95.9	1.565E-01	42.663	363.432
203/1953	-2.74	-4.59	67	1.095	1.17	30.41	-65.3	1.165E-01	40.280	327.658
203/2000	-2.79	-4.64	67	1.101	1.12	30.64	-65.5	1.102E-01	41.032	330.634
203/2023	-2.73	-4.59	67	1.617	1.27	37.12	-105.6	1.256E-01	45.271	395.356
203/2053	-2.72	-4.57	67	2.176	1.35	41.06	-135.1	2.336E-01	49.324	433.614
203/2053	-2.69	-4.53	67	2.144	1.34	41.75	-149.7	2.302E-01	40.756	421.662
203/2100	-2.72	-4.59	66	3.010	1.45	50.65	-222.0	3.231E-01	54.621	495.274
203/2123	-2.69	-4.57	66	2.471	1.39	45.49	-176.7	2.655E-01	51.055	460.407
203/2130	-2.64	-4.53	65	2.302	1.30	45.06	-172.1	2.557E-01	49.667	454.051
203/2153	-2.66	-4.55	66	2.151	1.35	42.02	-151.7	2.310E-01	00.302	401.171
203/2208	-2.65	-4.55	66	2.645	1.41	47.49	-194.7	2.043E-01	53.414	479.047
203/2223	-2.51	-4.42	65	2.686	1.41	47.02	-206.9	2.006E-01	99.542	403.274
203/2238	-2.01	-4.75	65	2.363	1.37	44.02	-162.3	2.537E-01	52.076	470.195
203/2253	-2.91	-4.08	65	2.812	1.43	40.93	-193.5	3.017E-01	56.615	502.614
203/2322	-2.01	-4.74	65	2.058	1.43	49.34	-203.3	3.062E-01	55.235	503.345
203/2337	-2.09	-4.79	66	4.718	1.61	63.59	-359.9	5.063E-01	66.240	601.769
203/2352	-2.97	-4.09	66	4.925	1.62	64.76	-369.4	5.203E-01	60.717	617.523
204/0007	-3.01	-4.93	66	4.678	1.60	63.11	-343.6	5.017E-01	64.363	609.736
204/0022	-3.00	-4.91	67	4.416	1.50	61.37	-321.9	4.737E-01	68.943	637.008
204/0037	-3.04	-5.06	66	4.718	1.61	63.37	-343.3	5.060E-01	69.295	615.076
204/0052	-3.08	-5.03	66	4.138	1.56	59.35	-293.5	4.437E-01	67.031	506.301
204/0107	-3.12	-5.00	66	3.467	1.49	54.31	-233.6	3.716E-01	64.106	543.551
204/0122	-3.11	-5.05	67	2.755	1.42	40.42	-170.5	2.953E-01	59.425	494.715
204/0137	-3.10	-5.03	66	2.324	1.37	44.47	-146.6	2.420E-01	56.062	467.274
204/0152	-3.01	-4.96	66	2.349	1.37	44.72	-152.0	2.519E-01	55.002	467.771
204/0207	-3.00	-4.95	65	1.905	1.31	40.23	-119.7	2.049E-01	51.298	433.365
204/0222	-2.98	-4.93	65	1.865	1.30	39.05	-116.7	2.000E-01	50.662	430.137
204/0237	-2.91	-4.06	65	2.016	1.33	41.93	-130.5	2.162E-01	50.940	442.960
204/0252	-2.04	-4.00	65	7.63	1.10	25.49	-41.5	0.080E-02	37.346	304.207
204/0307	-2.04	-4.01	64	6.79	1.07	21.04	-36.1	7.207E-02	36.007	262.265
204/0322	-2.76	-4.72	64	5.40	1.03	21.45	-27.9	5.796E-02	33.007	261.316
204/0337	-2.75	-4.72	64	6.90	1.08	24.26	-37.7	7.412E-02	35.404	290.107
204/0352	-2.73	-4.60	64	6.44	1.06	23.43	-34.9	6.910E-02	34.492	290.406
204/0407	-2.71	-4.65	65	5.86	1.05	22.45	-31.2	6.220E-02	33.445	267.356
204/0422	-2.73	-4.66	65	8.01	1.11	26.13	-45.3	8.602E-02	36.774	302.019
204/0437	-2.74	-4.66	65	9.02	1.13	27.23	-52.3	9.606E-02	30.124	316.540
204/0452	-2.73	-4.62	66	9.33	1.14	28.16	-54.5	1.000E-01	39.373	335.625
204/0507	-2.73	-4.61	66	5.90	1.05	22.50	-31.0	6.424E-02	33.815	261.495
204/0522	-2.76	-4.63	67	1.971	1.32	40.98	-132.9	2.316E-01	40.557	410.256
204/0537	-2.75	-4.61	67	2.134	1.34	42.65	-146.0	2.391E-01	49.634	430.733
204/0552	-2.75	-4.50	60	1.213	1.20	32.16	-74.4	1.330E-01	41.768	330.762
204/0607	-2.74	-4.55	60	6.62	1.07	23.76	-35.9	7.109E-02	34.006	261.172
204/0622	-2.78	-4.60	60	6.96	1.08	24.36	-37.8	7.474E-02	35.743	260.013
204/0637	-2.79	-4.63	60	1.227	1.20	32.34	-74.7	1.317E-01	42.296	342.005
204/0652	-2.71	-4.54	68	2.974	1.44	50.36	-219.8	3.195E-01	54.277	403.770

15 BURDIE AVERAGES PARADELETS

DATE	1A-1M	10A-10M	RI	TALL	ED	10E	1	Z0	H	F
	deg	deg	Z	d/deg	X(10-3)	cm/300	m	cm	m/m	m/m
204/0700	-2.67	-4.40	60	1.484	1.25	35.43	92.0	35954-01	43.368	36.3 069
204/0723	-2.65	-4.46	60	1.359	1.22	34.04	-07.2	14600-01	42.040	34.0 955
204/0750	-2.69	-4.50	69	934	1.14	29.22	55.2	10040-01	50.039	30.0 603
204/0753	-2.67	-4.44	69	606	1.07	29.19	-30.2	25740-02	34.645	259 350
204/0800	-2.67	-4.47	70	021	1.11	26.46	-46.2	10020-02	36.911	226 522
204/0823	-2.65	-4.40	70	024	1.11	26.46	-47.2	10000-02	36.229	225 590
204/0850	-2.60	-4.41	70	947	1.14	20.31	-56.3	10170-01	30.001	209 704
204/0953	-2.71	-4.44	70	957	1.14	20.52	-55.5	10200-01	30.515	208 715
204/0950	-2.61	-4.34	70	1.643	1.27	37.44	-113.4	12665-01	44.005	359 435
204/0923	-2.53	-4.24	70	2.635	1.41	42.43	-203.2	200340-01	49.525	420 720
204/0950	-2.54	-4.26	70	3.356	1.40	53.52	-267.0	36090-01	53.546	423 029
204/0953	-2.54	-4.24	71	3.243	1.47	52.61	-255.2	33060-01	52.969	462 343
204/1006	-2.52	-4.12	71	3.591	1.53	56.09	-313.9	30270-01	55.122	404 122
204/1023	-2.55	-4.20	72	3.522	1.50	54.04	-282.3	32100-01	54.523	463 262
204/1050	-2.50	-4.14	72	3.345	1.40	53.43	-262.2	35920-01	52.024	450 232
204/1053	-2.37	-3.90	72	3.140	1.46	51.05	-262.1	33070-01	49.664	433.432
204/1100	-2.20	-3.78	72	1.901	1.32	41.15	-159.3	21330-01	30.044	355 241
204/1123	-2.01	-3.56	72	051	1.12	26.90	-60.5	93120-02	30.203	242 524
204/1130	-2.12	-3.67	73	2.740	1.42	40.40	-242.2	45910-01	43.694	395 034
204/1153	-2.13	-3.60	72	2.705	1.42	40.09	-230.1	29130-01	43.603	393.494
204/1200	-1.00	-3.30	72	2.440	1.30	45.20	-240.4	26630-01	37.360	367 015
204/1223	-1.74	-3.24	72	2.066	1.34	42.05	-390.7	22200-01	34.935	341 642
204/1230	-1.42	-2.07	72	2.062	1.34	42.09	-229.2	22320-01	30.460	330 717
204/1253	-1.31	-2.74	72	1.906	1.31	40.42	-210.0	20000-01	20.271	336 540
204/1300	-1.23	-2.65	72	1.652	1.22	32.64	-169.1	17080-01	26.321	296 030
204/1323	-1.09	-2.49	72	1.652	1.22	32.65	-202.9	17050-01	24.542	292 605
204/1330	-1.10	-2.50	72	.996	1.15	22.34	-102.1	10220-01	22.042	290 722
204/1357	-1.43	-2.06	72	1.455	1.24	35.31	-146.9	15210-01	22.961	203 676
204/1412	-1.94	-2.29	72	1.235	1.20	32.52	-151.0	13360-01	21.250	253 065
204/1427	-1.64	-1.95	72	1.374	1.23	34.34	-207.0	14350-01	18.470	255 100
204/1442	-1.10	-1.43	71	1.470	1.25	35.50	-329.5	15950-01	12.747	242 962
204/1600	-1.20	-2.61	72	2.112	1.34	42.56	-262.5	22020-01	27.406	325 604
204/1615	-1.28	-2.70	72	1.609	1.27	32.15	-179.2	17300-01	26.625	295 603
204/1630	-1.27	-2.69	72	2.157	1.35	43.01	-259.5	23360-01	20.602	330 699
204/1645	-1.02	-2.40	72	2.206	1.35	43.51	-305.0	23050-01	25.155	325 270
204/1700	*****	*****	**	*****	1.31	40.54	*****	20710-01	*****	*****
204/1715	*****	*****	**	*****	1.39	46.50	*****	22240-01	*****	*****
204/1730	*****	*****	**	*****	1.22	33.02	*****	14450-01	*****	*****
204/1745	*****	*****	**	*****	.96	12.30	*****	30070-02	*****	*****
204/1800	*****	*****	**	*****	.97	37.92	*****	40600-02	*****	*****
204/1815	*****	*****	**	*****	1.16	29.65	*****	11000-01	*****	*****
204/1830	-1.90	-2.25	72	2.024	1.33	41.68	-223.6	21000-01	23.007	306 213
204/1845	-1.05	-2.42	72	2.034	1.33	41.76	-271.1	21970-01	25.025	312 344
204/1900	-1.90	-2.33	72	1.883	1.31	40.19	-255.1	20350-01	23.747	290 052
204/1915	-1.87	-2.21	72	1.809	1.30	39.00	-250.0	19900-01	22.110	291 469
204/1930	-1.82	-2.15	72	1.895	1.31	40.22	-205.3	20300-01	23.501	294 350
204/1945	-1.91	-2.25	72	2.253	1.36	43.92	-335.3	24300-01	23.655	310 804
204/2000	-1.02	-2.30	72	2.408	1.30	45.45	-341.5	26020-01	25.650	331 266

15. HINDLE OVERLAYS - POLYMER FILMS

DIR. Z	TA-TW degC	TA-TW degF	RO Z	TAU d/cm ²	CP x10 ⁻³	OL cm ² /g	I a	ZO a	U g/cm ²	I g/cm ²
205/0014	-1.24	-2.35	75	904	1.15	20.95	92.3	105.00	23.209	125.626
205/0029	-1.30	-2.55	75	1.014	1.15	22.32	-93.7	100.60	25.295	204.315
205/0044	-1.59	-2.79	75	790	1.10	26.05	-63.6	105.40	25.996	109.837
205/0059	-1.94	-3.10	75	034	1.11	26.60	-52.4	103.64	22.653	399.369
205/0914	-1.66	-2.67	75	054	1.12	26.93	-67.5	101.50	22.003	197.402
205/0929	-1.60	-2.61	74	436	92	39.24	-29.4	46.61	22.626	149.334
205/0944	-1.53	-2.74	74	424	99	10.99	-29.1	45.92	21.947	147.160
205/0959	-1.42	-2.62	74	540	1.03	21.57	-47.0	50.60	22.552	169.692
205/1014	-1.53	-2.73	74	517	1.02	20.92	-32.5	55.39	22.971	351.930
205/1029	-1.69	-2.69	75	635	1.06	23.22	-46.0	62.90	25.454	172.301
205/1044	-1.05	-3.05	76	770	1.10	25.52	-55.4	102.60	20.204	106.913
205/1059	-2.30	-3.50	76	610	1.05	22.02	-36.7	66.02	30.560	101.920
205/1113	-2.41	-3.72	75	292	1.10	25.90	-40.1	104.00	33.740	206.391
205/1120	-2.43	-3.70	74	854	1.12	26.02	-52.5	91.32	34.696	230.931
205/1143	-2.47	-3.61	75	350	96	12.42	-12.3	33.61	27.620	152.325
205/1150	-2.30	-3.74	74	233	90	14.06	-10.7	24.09	24.362	120.022
205/1213	-2.50	-3.65	74	243	1.09	25.90	-43.3	22.24	35.982	207.803
205/1228	-2.00	-4.15	76	144	1.05	11.04	-5.3	15.32	23.759	103.509
205/1243	-2.03	-4.18	76	137	1.04	10.20	-4.2	14.63	23.641	100.323
205/1258	-2.03	-4.16	77	153	1.06	11.39	-5.7	16.35	24.252	104.654
205/1313	-2.75	-4.02	77	197	1.00	12.90	-7.2	20.95	25.306	114.902
205/1320	-2.77	-4.12	76	174	1.07	12.15	-6.8	105.60	24.735	114.632
205/1343	-2.63	-3.92	75	102	1.00	12.50	-7.6	19.20	24.413	114.920
205/1359	-2.39	-3.70	75	225	90	13.00	-10.1	23.90	24.190	121.102
205/1414	-1.05	-1.04	75	572	1.04	22.12	-56.7	61.60	17.035	130.163
205/1429	-1.50	-1.44	75	071	79	2.70	-3.5	76.31	12.420	53.300
205/1441	-1.25	-1.15	74	352	96	17.30	-30.1	37.65	12.455	162.728
205/1459	-1.16	-1.05	74	235	91	14.14	-22.2	25.19	11.612	05.515
205/1514	-1.44	-1.42	74	367	97	17.66	-37.5	39.28	13.720	113.717
205/1529	-1.47	-1.42	74	392	90	10.32	-41.2	42.19	14.050	120.014
205/1544	*****	*****	**	*****	93	15.55	*****	30.46	*****	*****
205/1559	-1.16	-1.10	73	355	96	17.30	-41.4	30.04	11.026	106.754
205/1614	.09	-1.70	74	495	1.02	20.52	-80.2	53.04	9.971	115.683
205/1629	.15	-1.71	74	509	1.05	22.30	-110.9	63.09	9.430	122.211
205/1644	-1.03	-1.92	74	591	1.05	22.42	-96.3	63.34	10.953	122.332
205/1659	.16	-1.71	74	630	1.06	23.15	-124.9	62.52	9.277	126.912
205/1714	.05	-1.04	74	640	1.06	23.35	-115.6	60.66	10.202	130.755
205/1729	.23	-1.65	73	507	1.05	22.35	-119.0	60.93	0.766	123.899

APPENDIX C: Sample of data available

Three data files are available: 2 second (raw) data; 1-minute average (raw) data; and 15-minute average corrected data, calculated parameters and data quality assessment (variances, flags).

The 2-second data is on digital tape and the 1-minute data is on disc files. A sample listing of each is in Figs C.1 and C.2. The only difference between them is the 1-minute data contains latitude, longitude, ship course and ship speed. The channel numbers are identified in Table 3. 1.

The 15-minute summaries were produced in real time on the ship. Fig C.3 is a sample of the on-line printout. The top line is time; below is latitude and longitude. PLOG is the output of an uncalibrated pilot log; LORSPEED is SHIPS. WS 10 is true wind speed reduced to the 10m level. TW was water temperature from a thermistor towed behind the ship. This channel was highly intermittent since the tow could not remain in the water continuously. SIGMAS are standard deviations over 15-minute intervals of the various quantities. Below is the data quality assessment. BVAR are background variances, RVAL are threshold variances (operator settable) which if exceeded generate a FLAG. 15 data is the 100 min variance of that channel. The bottom contains operator settable options and variables.

AD-A132 105

DATA VALIDATION AND SUMMARY FOR THE NRL REMOTE SENSING
EXPERIMENT: PHELPS. (U) NAVAL RESEARCH LAB WASHINGTON
DC J A KAISER ET AL. 26 AUG 83 NRL-MR-5160

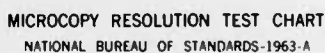
2/2

UNCLASSIFIED

F/G 4/2

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

192/2356

40 48.68 N 69 17.36 W
 LORSPEED = 4.4 kts, PLOG = 12. kts HEAD = 106 deg, CSE = 130 deg

----- CORRECTIONS TO 10m -----
 TA = 14.490 C TDP = 14.362 C WS10 = 5.277 MPS TRUE WD = 101.65

----- CORRECTIONS FOR SHIP ROLL -----
 ROLL SPEED = .0 m/s RMS ROLL = .6

TW = 11.60 C TS = 15.49 C
 SAL = 30.00 SIGT = 22.02 g/cm**3

TA-TW = 2.886 C TDP-TW = 2.757 C $eW-e = -.271E+01$ mbar
 $H = -.708E+01$ w/m**2 $E = -.346E+02$ w/m**2
 TVA-TW = 2.915 C TVA = 14.57 C TVW = 11.66 C
 RH = 99.1602 % QW-QA = -1.66 g/kg
 QW = 8.373 g/kg QA = 10.03 g/kg
 TAU = .28 d/cm**2 L = 45.6 m
 $Z_0 = .002873$ cm
 $Cd = .92E-03$ $Ch = .36E-03$ $Ce = .13E-02$
 $U* = 15.10$ cm/sec $T* = -.9E-01$ C $Q* = .00E+00$ g/kgm

 SIGMAS: TA = .1208E+00 TDP = .1297E+00 WS = .1415E+02
 WD = .3632E+03 PLOG = .5010E+01
 TS = .0000E+00 CS = .0000E+00

CHAN.	15 FLAG	CUM. FLAG	BVAR	RVAL	15 DATA
0	0	0.0	.1000E-05	.1000E+04	.1451E+01
1	0	0.0	.1000E-05	.1000E+04	.1473E+01
2	0	0.0	.1000E-05	.1000E+04	.2699E+01
3	0	0.0	.1000E-05	.1000E+04	.4727E+01
4	0	0.0	.1000E-05	.1000E+04	.1379E+00
5	0	0.0	.1000E-05	.1000E+04	.3504E+00
6	0	0.0	.1000E-05	.1000E+04	.1363E+00
7	0	0.0	.1000E-05	.1000E+04	.3859E+00
8	0	0.0	.1000E-05	.1000E+04	.1549E+02
9	0	0.0	.1000E-05	.1000E+04	.3000E+02
10	0	0.0	.1000E-05	.1000E+04	.8221E+04
11	0	0.0	.1000E-05	.1000E+04	-.184E+00
12	0	0.0	.1000E-05	.1000E+04	.1000E+02
13	0	0.0	.1000E-05	.1000E+04	.0000E+00
14	0	0.0	.1000E-05	.1000E+04	.1062E+03
15	0	0.0	.1000E-05	.1000E+04	.1250E+01
16	0	0.0	.1000E-05	.1000E+04	.3027E+02
17	0	0.0	.1000E-05	.1000E+04	.2000E-04
18	0	0.0	.1000E-05	.1000E+04	.6292E+02
19	0	0.0	.1000E-05	.1000E+04	.1266E+02
20					.4081E+02
21					-.693E+02
22					.4422E+01
23					.1301E+03

OPTIONS: TA.TDP=1 ROLL COR.WIND=1 SHIP COR.WIND=1 WS1.WS2 OR BOTH=1
 PA = 1013.00 HT = 10.00 HW = 22.50 DT = 2.00

Fig. C.3. Sample of the 15-minute data and parameter summary provided on-line during the experiment.

APPENDIX D: List of Instruments Used

TA1, TDP1: General Eastern 1200 MPS, S/N 91005-91008

Sensors: TA1: Rosemount PRT 78-39-3, S/N 95014

TDP1: Rosemount PRT 146RB, S/N 14119

TA2, TDP2: General Eastern 450, S/N 95005

Sensors: TA1, TDP1: General Eastern 450B, S/N

WS1, WD1: Teledyne Geotech WS 201, S/N none

(NRL Equipment No. 38417)

Sensors: WS1: S/N 036

WD1: S/N 037

WS2, WD2: Teledyne Geotech WS 201, S/N none

(NRL Equipment No. none)

Sensors: WS2: S/N 095

WD2: S/N 115

TS, CS: Plessey Thermosalinograph 6600T

ROLL: Robinson-Halpern Model 685B, S/N 1588

Seconday Temperature Calibration Standards:

Dymec Quartz Thermometer 2801A, S/N 618-00031

Probes: Ch. 1: S/N 972-1

Ch. 2: S/N 978-20

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